OPENING & CONTRACTS WITH LD'S

FRANK O'DEA

MATERIALS

EARTHWORK LESSONS LEARNED
&
CONCRETE LESSONS LEARNED

JEREMY WOLCOTT

Earthwork Lessons Learned

1. C-22 Cards
    - List tests to be run in remarks (spreadsheet attached)
    - Will not get paid for tests that are not required (spreadsheet attached)
    - List LOTs QC and VT represent for subgrade and base (LIMS entry)
    - Use correct sample, pay item and material number
    - Retaining wall use material number 092L, not 004L. Also, retaining wall sample numbering is ARE01Q, not A001Q

2. Resolution Sampling
    - Take resolution sample at the same time as VT and QC samples are taken (embankment, subgrade, limerock)

3. Earthwork Record System (i.e. Density Log Book)
    - List soil classification and passing -200 on proctor sheets
    - Subgrade summary sheets: VT verifies 8 QC LOTs
    - Base summary sheets: VT verifies 16 QC LOTs
    - Record subgrade mixing depths before sample is sent to lab for testing
    - Rock base thickness: use random stations for cores (not even stations)
    - Rock base thickness: record depth to nearest tenth of an inch (10.80)
    - VT and QC test first lift of embankment above water table
    - Last lift of embankment has to be placed and tested as a 6 inch lift
    - QC tests first lift of embankment for structures
    - QC tests first lift on both sides of the pipe
    - Zero feet to three feet behind RE Wall achieve 90% density and beyond three feet achieve 95% density (same LOT number)
    - Use 6 inch lifts behind RE Wall

Material Number 004L
Section 120 - Excavation and Embankment

Test Method	Description	QC	VT
AASHTO T99	Standard Proctor	1 per soil type	1 per soil type
AASHTO M145	Classification of Soils	1 per soil type	1 per soil type
AASHTO T88	Particle Size Analysis - By Wash Only	1 per soil type	1 per soil type
*AASHTO T89	Liquid Limit	1 per soil type	1 per soil type
AASHTO T90	Plastic Limit	1 per soil type	1 per soil type
FM1-T267	Organics	Engineer's Option	Engineer's Option

*NOTE: T89 is required when the material has a plastic limit.

Sample Numbering Sequence▶ **A001Q, A001V, A001I**

Material Number 092L
Section 548 - Retaining Wall Systems

***When entering test results for material number 092L , the regular T-88 gradation test should be killed and the T88-SP548 test added. This test will give the proper sieves to meet the Specification 548 gradation requirements.**

Test Method	Description	QC	VT
FM1-T180	Modified Proctor	1 per soil type	1 per soil type
AASHTO M145	Classification of Soils	1 per soil type	1 per soil type
AASHTO T88	Particle Size Analysis - By Wash Only	1 per soil type	1 per soil type
*AASHTO T89	Liquid Limit	1 per soil type	1 per soil type
AASHTO T90	Plastic Limit	1 per soil type	1 per soil type
FM1-T267	Organics	1 per soil type	1 per soil type
FM 5-550A	PH - no metal	1 per soil type	1 per soil type
FM 5-550B	PH - metal	1 per soil type	1 per soil type
FM 5-551	Resistivity of soil & water	1 per soil type	1 per soil type
FM 5-552	Chloride in soil & water	1 per soil type	1 per soil type
FM 5-553	Sulfate in soil & water	1 per soil type	1 per soil type

*NOTE: T89 is required when the material has a plastic limit.

Sample Numbering Sequence▶ **ARE01Q, ARE01V, ARE01I**

Material Number 440
Section 914 - Materials for Subgrade Stabalization

Test Method	Description	QC	VT
AASHTO T88 (also 3.5 & No. 4 sieves)	Particle Size Analysis (Soil) - By Wash Only		2 per mile
*AASHTO T89	Liquid Limit		2 per mile
AASHTO T90	Plastic Limit		2 per mile
FM1-T267	Organics		2 per mile

*NOTE: T89 is required when the material has a plastic limit.

Sample Numbering Sequence► **A001V, A001I**

Material Number 020L
Section 160 - Stabilizing

Test Method	Description	QC	VT
FM1-T180	Modified Proctor	1 per 2 consecutive lots	1 per 8 consecutive lots
AASHTO M145	Classification of Soils	1 per soil type	1 per soil type
AASHTO T88	Particle Size Analysis - By Wash Only	1 per 2 consecutive lots	1 per 8 consecutive lots
*AASHTO T89	Liquid Limit	1 per 2 consecutive lots	1 per 8 consecutive lots
AASHTO T90	Plastic Limit	1 per 2 consecutive lots	1 per 8 consecutive lots
FM 5-515	LBR *	1 per 2 consecutive lots	1 per 8 consecutive lots
FM1-T267	Organics	Engineer's Option	Engineer's Option

*NOTE: T89 is required when the material has a plastic limit.

Corresponds with QC sample # for the lot.

Sample Numbering Sequence► **A001Q, A002Q, etc.**

Note: *The verification LBR sample is an independent sample and not tested from the same sample as the remaining tests. Sample number corresponds with the lot the sample was taken from with the addition of the L. A006LV, etc. (ONLY TEST REQUIRED IS LBR)

Example:

VT sample from lot 3 and VT LBR sample from lot 6.

QC Sample #	Lots represented	VT sample #
A001Q	1-2	
A002Q	3-4	A002V
A003Q	5-6	**A006LV**
A004Q	7-8	

Material Number 405L
Section 200 - Rock Base (Limerock)

Test Method	Description	QC	VT
FM 1-T180	Modified Proctor	1 per 8 consecutive lots	1 per 16 consecutive lots
*AASHTO T89	Liquid Limit	1 per 8 consecutive lots	1 per 16 consecutive lots
AASHTO T90	Plastic Limit	1 per 8 consecutive lots	1 per 16 consecutive lots
AASHTO T27*	Gradation	1 per 8 consecutive lots	1 per 16 consecutive lots
FM 5-514	Carbonate		1 per source per project

*Run No. 3 1/2 and No. 4 sieves - Report with modified proctor in LIMS
*NOTE: T89 is required when the material has a plastic limit.

Sample Numbering Sequence▶ **A001Q, A001V, A001I**

Material Number 421L
Section 915 - Cemented Coquina Shell Material

Test Method	Description	QC	VT
FM 1-T180	Modified Proctor	1 per 8 consecutive lots	1 per 16 consecutive lots
*AASHTO T89	Liquid Limit	1 per 8 consecutive lots	1 per 16 consecutive lots
AASHTO T90	Plastic Limit	1 per 8 consecutive lots	1 per 16 consecutive lots
AASHTO T27*	Gradation	1 per 8 consecutive lots	1 per 16 consecutive lots
FM 1-T011	Sieve Analysis	1 per 8 consecutive lots	1 per 16 consecutive lots
FM 5-514	Carbonates		1 per source per project

*Run No. 3 1/2 and No. 4 sieves - Report with modified proctor in LIMS
*NOTE: T89 is required when the material has a plastic limit.

Sample Numbering Sequence▶ **A001Q, A001V, A001I**

Material Number 054L
Section 283 - Reclaimed Asphalt Pavement Base

Test Method	Description	QC	VT
FM 1-T180	Modified Proctor	1 per 8 consecutive lots	1 per 16 consecutive lots
AASHTO T27*	Gradation	1 per 8 consecutive lots	1 per 16 consecutive lots

*Run No. 3 1/2 and No. 4 sieves - Report with modified proctor in LIMS

Sample Numbering Sequence▶ **A001Q, A001V, A001I**

Concrete Lessons Learned

1. Concrete Mix Design Approval Process
    - Use project's QC Plan page CNC 3.3 or the attached form for submitting mix designs
    - Mix design process:
        - Contractor ↔ Producer → PA → M&R → PA & Producer

2. Proper Class of Concrete
    - Refer to Standard Indexes, Project Specifications and Plans
    - When submitting mix designs list application and environmental class
    - If confusion please ask before placing concrete

3. Mass Concrete
    - Mass plan is in addition to and separate of the project QC plan
    - Temperature logs submitted to M&R in a timely manner
    - Does data make sense (inside hotter than outside), missing data
    - Contractor takes corrective action in the field if the temperature differential exceeds the mass plan preventative temperature
    - If the temperature differential exceeds the specification (35°F) revise the mass plan

4. Drilled Shaft Plans
    - Drilled Shaft Plan is in addition to and separate of the project QC plan
    - Include elapse time (total time from first batching to finish placing entire drilled shaft), not the transit time for the truck
    - Proper finishing of top of shaft (over flow of concrete)
    - Mix design approved after elapse time is known to verify slump loss

5. LIMS sample numbering
    - Sample numbering spreadsheet attached
    - Keep LOTs by mix design
    - Randomly verify 1 of 4 LOTs and list verified LOTs in LIMS.

6. Pre-pour meeting, Pre-drill meeting and concrete pour notifications
    - Use **D5_Pour@dot.state.fl.us** and **D5_Drill@dot.state.fl.us** emails
    - Give as much notice as possible
    - M&R sends a representative to all pre-pour & pre-drill meetings
    - M&R may miss actual concrete pours. M&R does random IAs/QARs

7. Field Quality Assurance Review (QAR) Findings
    - Curing Boxes - insulation, location, size, Hi-Lo thermometer.
    - Sampling at final placement (i.e. end of pump on deck)
    - Testing equipment marked and calibration paperwork in field
    - Technician Roles
        - QC – not reporting failing test results and not rejecting trucks
        - VT – w/c ratio, 1% batch tolerances, truck ID cards, verify water addition

Contractor Quality Control
CNC 3.3 Raw Materials
Concrete Mix Design Issue Form

Financial Project No: _____ **Contractor:** _____

CNC 105-3.3.1 Identify Source

Primary: _____

FDOT Plant No. 1: _____ Plant Location 1: _____

FDOT Plant No. 2: _____ Plant Location 2: _____

Secondary: _____

FDOT Plant No. 1: _____ Plant Location 1: _____

FDOT Plant No. 2: _____ Plant Location 2: _____

Note: Mix requests must be Official FDOT Approved Mix Designs and will be subject to limitations thereon. ***Do not*** *submit or transmit copies of actual Mix Designs.*

Mix Number	Class Type	Application	Environ. Class

_____ _____ _____

Signature of **Producer** Representative | Print Name | Date

_____ _____ _____

Signature of **Contractor** Representative | Print Name | Date

Insert completed form as part of, or an addendum to, section CNC 105 3.3 of the Contractor Quality Control Plan.

Use additional sheets if necessary

NOTES AND EXAMPLES OF CONCRETE SAMPLE NUMBERING PER MIX DESIGN

Mix Design	Class I	LOTS	Class II	LOTS	Class III	LOTS	Class IV	LOTS	Class V	LOTS
Example:	A1001Q	1	A2001Q	1	A3001Q	1	A4001Q	1	A5001Q	1
Class I Special	A1001V	1-4	A2001V	1-4	A3001V	1-4	A4001V	1-4	A5001V	1-4
Class II	A1002Q	2	A2002Q	2	A3002Q	2	A4002Q	2	A5002Q	2
Class III	A1003Q	3	A2003Q	3	A3003Q	3	A4003Q	3	A5003Q	3
Class IV and V	A1004Q	4	A2004Q	4	A3004Q	4	A4004Q	4	A5004Q	4
Example:	B1001Q	1	B2001Q	1	B3001Q	1	B4001Q	1	B5001Q	1
Class I Paving	B1002Q	2	B2002Q	2	B3002Q	2	B4002Q	2	B5002Q	2
Class II Deck	B1002V	1-4	B2003Q	3	B3003Q	3	B4003Q	3	B5003Q	3
Class III Seal	B1003Q	3	B2003V	1-4	B3003V	1-4	B4003V	1-4	B5003V	1-4
Class IV Drilled Shaft & Class V Special	B1004Q	4	B2004Q	4	B3004Q	4	B4004Q	4	B5004Q	4
Example: Class of concrete for:	C1001Q	1	C2001Q	1	C3001Q	1	C4001Q	1	C5001Q	1
Slipform, Auger Cast Pile Grout, Micro Silica,	C1002Q	2	C2002Q	2	C3002Q	2	C4002Q	2	C5002Q	2
Calcium Nitrite, Colored Concrete, etc. that would be	C1003Q	3	C2003Q	3	C3003Q	3	C4003Q	3	C5003Q	3
same class as another but will have different design	C1004Q	4	C2004Q	4	C3004Q	4	C4004Q	4	C5004Q	4
mix numbers.	C1004V	1-4	C2004V	1-4	C3004V	1-4	C4004V	1-4	C5004V	1-4

- The "alpha" character is used to identify different design mixes of the same class and the first number identifies the Class of concrete.
- The sample numbers and lots will be numbered sequentially by mix design.
- QC samples must include lot numbers (A4001Q is Lot 1, A4002Q is Lot 2, etc.)
- VT sample is the lot directly compared to the QC sample but must indicate the lots that are being verified, not just the lot being compared, i.e., A4001Q-Lot 1, A4002Q-Lot 2, A4003Q-Lot 3 and A4004Q-Lot 4, the verification sample A4001V compares with A4001Q but the lot numbers for A4001V are 1-4.
  - Continuing, A4005Q-Lot 5, A4006Q-Lot 6, A4007Q-Lot 7, A4008Q-Lot 8, the verification sample A4007V compares with A4007Q but the lot numbers for A4007V are 5-8.
  - Continuing, A4009Q-Lot 9, A4010Q-Lot 10, A4011Q-Lot 11, A4012Q-Lot 12, the verification sample A4011V compares with A4011Q but the lot numbers for A4011V are 9-12.

Matl. No. 160F and 160L

- Corresponding Quality Control (QC) and Verification (V) samples must entered for 160F and 160L
  - Example: Matl No. 160L Sample No. A1001Q - Matl No. 160F Sample A1001Q
    Matl. No. 160L Sample No. A1001V - Matl No. 160F Sample A1001V

- **Add mix design in Comments section during Login step.**
- When test results between QC and VT samples exceed comparison limits resolution must be run on the QC and VT hold cylinders.
- If select is **NO** on Sample Status Concrete please indicate what test failed.
- A DDM is initiated when something (material, plastic or strength testing, sample frequency, etc.) fails specification requirements. Need method of acceptance stated on DDM.
  - EXCEPTION: A DDM is not needed if the random number did not come up.
- AC is the Approval Code for all verified samples.
- Check Sampling Status Progress Report for outstanding issues.
  - Reports - Contract Reports - Sampling Status Progress... - Sampling Status Progress Report. Enter Contract Id (Example T5055)
- **If sample went to resolution do not approve samples. M&R laboratory will code samples.**

  Who approves what:
  - 160F - PA approves the lot after the verification test has been entered and the lot is closed.
  - 160L - Verification lab approves the lot when the verification data is entered and after the lot is closed.
  - Resolution - M&R Lab approves the lot (QC, VT and Resolution samples) when the resolution data is entered and the lot is closed.

SESSION A

FINAL ESTIMATES

JOHN BURNETTE AND TONII BRUSH

CONTRACT ADMINISTRATIVE

UPDATE TRAINING

NOVEMBER 2006

FINAL ESTIMATES

Florida Department of Transportation

DISTRICT FINAL ESTIMATES OFFICE

DISTRICT FIVE CONSTRUCTION

QUALITY CONTROL PLAN

Approved by:

Frank J. O'Dea. P.E.
District Construction Engineer (D5)

Effective: October 2006

QUALITY CONTROL PLAN

I. PURPOSE

This Quality Control (QC) Plan for the District Five Final Estimates Office (DFEO) presents the guidelines to be used to produce and verify the final pay quantities in accordance with contract documents and related publications, and to effect the correct final payment to the contractor.

II. SCOPE

These guidelines establish a plan for monitoring the estimate progress throughout construction and identify the methodology for the initial and overview audit of the final estimate package during preparation and as received from project personnel on both in-house Construction Engineering and Inspection (CEI) projects and consultant CEI projects (CCEI). An administrative procedure for final payoff and close out will be outlined.

III. CONTRACT DOCUMENTS

The following documents are referenced within this QC Plan and are included in the term "contract documents" and make up the measurement and payment procedural policy for the final estimate package:

Special Provisions
Technical Special Provisions
Plans
Road, Structure and Traffic Operations Standards
Supplemental Provisions
Standard Specifications
Bid Blank
Other documents by contract reference and related publications:
Final Estimate Review and Administration Manual
Final Estimate Preparation and Documentation Manual
Basis of Estimates Handbook
Sample Computation Manual
Construction Project Administration Manual (CPAM)
Final Estimates Guide List

IV. ACRONYMS USED

CEI	Construction Engineering and Inspection
CCEI	Consultant Construction Engineering and Inspection
CPAM	Construction Project Administration Manual
DCE	District Construction Engineer
DFEM	District Final Estimates Manager
DFEO	District Final Estimates Office
DOCO	District Operations Contract Office
FEGL	Final Estimates Guide List
FES	Final Estimate Sheet
QC	Quality Control
RFES	Resident Final Estimates Specialist
RFEO	Resident Final Estimates Office
SFEO	State Final Estimates Office

V. TRAINING

The DFEO staff will take advantage of any training offered by the State Final Estimates Office (SFEO). Through the SFEO and the District Construction Training Coordinator, the DFEO will be aware of available training and develop specific training requests, by in-house and consultant instructors, for training of Resident Final Estimates Office (RFEO) staff, project administrators, consultants, and other staff involved with the development of final estimates.

The DFEO will train the resident office staff on an as-needed basis. Meetings with the RFEO staff and select project administrators will afford opportunity for exchange of ideas, recent policy or procedural changes, and discussion of mutual problems. The DFEO Final Estimates Notes (see **Appendix A**) and checklists will be updated as a result of these meetings and distributed as a ready reference to commonly recurring problems and final estimate package procedures.

VI. RESOURCES

A. PERSONNEL

The DFEO staff will assist the resident final estimates specialists (RFES) in all aspects of final estimates preparation. Based on our experience with project personnel, periodic reviews of an estimate's progress will be conducted.

B. FILES

DISTRICT FINAL ESTIMATES JOB FILE

Upon receipt of a Notice of Beginning of Construction, a District Final Estimates Job File is created and maintained in the DOCO. This file may contain conversation sheets, audit notes, contractor documents, etc., and follow the final estimate package through the checking process. This file is retained in the DOCO until pay off and then submitted to District Archives for storage (or scanned, if applicable).

DISTRICT CONSTRUCTION ENGINEER OFFICE PROJECT FILES

During construction, the DOCO will share the District Construction Engineer (DCE) office project files that are usually the contract file, contract change file, correspondence file, estimates file, sublet file, and compliance file. At Conditional or Final Acceptance, the complete DCE office project files and the DCE set of half-size plans are moved to the DOCO and become a part of the DOCO project files. They remain in the DOCO until the project is paid off.

FINAL ESTIMATE PACKAGE

The official construction records are to be properly maintained throughout construction by the project administrator. The official construction records consist of any type of document designated by its purpose, intention and use as a part of the development, execution, completion and subsequent pay off of a construction project. Upon completion of the final estimate package, the project administrator shall submit the final estimate package to the DOCO within twenty five (25) days of Conditional or Final Acceptance, whichever comes first.

For consultant CEI projects, the consultant shall submit the final estimate package to the DFEO within thirty (30) days of Conditional or Final Acceptance, whichever comes first unless specified in their Scope of Services.

The DOCO will perform the necessary processes as defined in the Final Estimate Review and Administration Manual. The DOCO will retain the final estimate package until the contract is paid. After payoff, the final estimate package is forwarded to District Archives for the required retention period or will be scanned according to current procedures. If the volume is low, this function will be performed on an as-needed basis.

C. STORAGE OF FINAL ESTIMATES DURING DOCO PROCESSING

The final estimate box storage area contains metal storage bins to store final estimate boxes and are sorted as New, Submit, Pass, Paid, and Reserve. The boxes remain in the DOCO until paid off. If space is limited, the Reserve final estimate boxes will be stored in the District Office Construction Storage area that is a climate controlled, secure location.

VII. DEVELOPING THE FINAL ESTIMATE PACKAGE

A. PRE-CONSTRUCTION

At the design phase 90% field review, the RFEO should participate, with emphasis on developing the computation book. Upon request by the RFES, a DFEO representative may attend these reviews.

At the Resident Office, the project computation book is reviewed for completeness. Incomplete calculations and errors are resolved, using Design assistance as necessary.

Unusual pay item requirements are noted and record keeping discussed with key technicians. Missing pay items are flagged to be addressed on an early supplemental agreement. Removal items to be paid are measured and earthwork verification is completed.

The RFES shall arrange a pre-kickoff meeting with the assigned CEI staff on how to manage the final estimates package development of all newly awarded contracts for all in-house contracts. An appropriate checklist and/or other material for estimates package development will be provided to the CEI staff at this meeting. For CCEI projects, the CCEI should contact the DFEO to discuss the need and possible scheduling of pre-kickoff meetings prior to the Pre-Construction meetings.

The DFEM may arrange a pre-kickoff meeting with the assigned CEI staff on how to manage the final estimates package development of newly awarded contracts on some Consultant CEI contracts. The determination to conduct the meeting will be based on the complexity of the contract and the level of experience of the project staff. An appropriate checklist and/or other material for estimates package development will be provided to the CEI staff at this meeting. The CCEI should contact the DFEO to discuss the need and possible scheduling of pre-kickoff meetings prior to the Pre-Construction meetings.

B. CONSTRUCTION

The project administrator shall begin a Contract Time Folder. The first chargeable day is verified and the Contract Time Folder is kept current. A graphic record of calendar days, suspension days, weather days, and key milestone dates noted can help resolve complex time charge situations. Project Administrator shall complete a Contract Time form (DOT Form 700-050-31). See **Appendix B for the Contract Time Summary** and see **Appendix C for Page 2 and 3.**

The former Project Engineer's Construction Check List is now replaced by the Final Estimates Guide List (FEGL). The Final Estimates Guide List can be found at the DOT Construction website at: http://www11.myflorida.com/Construction/constadm/guidelist/finalest/feguidelist.htm. The project administrator will review the FEGL before beginning a new phase of work, and as the work progresses rather than wait until the end of work. A careful, attentive adherence to the Guide List will certainly lead to a more complete and correct final estimate. The earlier requirement that complete (or phase work) pay item documentation must be in the estimate file within thirty (30) days of that item's completion shall be adhered to. The majority of minor pay item documentation should be furnished by field technicians in a final estimate-ready condition. Project personnel are to take final measurements as pay items progress through construction.

For in-house CEI projects, the DFEO staff shall perform periodic reviews under the guidance and supervision of the DFEM. These reviews will be identified and documented as DFEO Quality Control Progress Field Reviews. DFEO staff performing reviews will complete the **Final Estimates Field Review form (DOT Form 700-050-36)**, attached as **Appendix D** and the **DFEO Quality Control Progress Field Review form**, attached as **Appendix E**. The frequency of these reviews shall be determined by the DFEM, based on the dollar value of the contract. These reviews will serve as the Initial Audit. The DFEM or staff shall perform overview audits at 100% construction complete.

For audit purposes, the project administrator and their staff are limited to black ink or pencil. The RFEO shall use red for their review documentation. Green and blue are reserved for the DFEO. Green is reserved for the DFEM, red is reserved for the RFEO Reviewers, and blue is reserved for the DFEO Auditors. Refer to Chapter 4.2.4, Review and Administration Manual for specifics.

C. RFEO/CCEI CHECKING

Duties of the RFES and staff in support of the Districts' Final Estimates Office Quality Control Plan are identified below:

For In-house CEI projects:

1. Advise and assist in the early verification/correction of plans and computation books. Items designated to be paid by Plan Quantity do not require design calculation verification. The RFES will review changes or adjustments made by the project administrator.

2. Advise and assist the project administrators' staff in the timely gathering and documenting of measurement data.

3. Provide, at requested intervals, a final estimate progress report on all in-house jobs assigned to that Resident Office. Unusual circumstances regarding acceptance of projects should be relayed to the DFEO as soon as known.

4. Coordinate with the resident asphalt specialist, all asphalt pay adjustments and reductions.

5. The RFEO staff will check final computation books for compliance with procedures and completeness. DFEO will perform an Initial Audit of Earthwork, Asphalt, Concrete, Penalties and any problem areas they might want to review and sign the **DFEO Project Audit Transmittal form** (see **Appendix F**) in the computation book. RFEO shall submit the final estimate package to the DOCO within twenty five (25) calendar days after conditional or final acceptance, whichever occurs first.

6. The DFEO will perform a Post Audit of all "Certified Final Estimate" contracts processed through the DOCO. DFEO will provide the State Final Estimates Manager a report on each Post Audit

For Consultant CEI projects:

1. The Consultant CEI will follow their QC Plan as submitted to the DFEM.

2. The DOT consultant CEI project manager will review the final estimate progress at appropriate stages of construction.

3. At final estimate completion, the Consultant CEI Final Estimate Level II shall sign the FES signature page (over a printed name). The consultant CEI project administrator shall review all final computation books for procedure and completeness, and sign (over a printed name) on the FES signature page.

4. At the DFEM's discretion the DFEO will perform periodic phase reviews on CCEI projects which will result in a check of items completed and in comp book.

5. The consultant CEI is to submit a complete final estimate package to the DOCO within thirty (30) calendar days after conditional or final acceptance, whichever occurs first or as stated in the scope of services. If training is required for close-out, the estimate package is required to be submitted to DOCO within twenty five (25) calendar days. CCEI shall submit an executed **Certification as to Accuracy of Final Estimate form (DOT Form 700-050-38)** (see **Appendix I**) along with the final estimate package. The CEI project manager shall monitor these submittals. The DFEO will perform a Post Audit of all "Certified Final Estimate" contracts processed through the DOCO. DFEO will provide the State Final Estimates Manager a report on each Post Audit.

D. AUDIT TYPES

The DFEM will designate the auditor, and frequency of the audits by completing a **DFEO Project Audit Transmittal form** (see **Appendix F**). This form is taped into the front inside cover of the computation book or Final Estimate Sheet folder.

RFEO Checker -- RFEO performs a comprehensive check of all items for procedural compliance and mathematical errors.

DFEO Risk Based Review -- DFEO auditor performs a review of Earthwork, Asphalt, Concrete, Penaltities and any problem areas.

Auditor notation on the FES will indicate the level of each items checking intensity as defined below:

A slash (/) will denote a close math and procedure review.

Auditor's initials will denote a cursory math and procedure review.

E. DFEO QUALITY CONTROL PROGRESS FIELD REVIEWS

Based on the type, complexity, and duration of a project and the known ability of the project administrator and staff, independent periodic progress field reviews will be performed by the DFEO staff at a minimum frequency or better.

The following intervals are minimums:

- Review interval for contracts with an original contract amount of less than two million will be one.
- Review interval for contracts with an original contract amount of two million dollars to ten million dollars is two.
- For construction contracts with an original contract amount of more than ten million dollars, the review interval is three.
- Lump Sum and Design Build contracts require a minimum of one review.

Each field progress review will be prearranged and will result in a completed **Final Estimates Field Review form (DOT Form 700-050-36)** (see **Appendix D**) and the **DFEO Quality Control Field Review form** (see **Appendix E**) that identifies deficiencies and needed corrections. These reports will be discussed with the project administrator and appropriate personnel at the Resident Office who will have an opportunity to provide a written response to the DFEM. Distribution of these reports will be at the reviewer's discretion, based on the condition of the final estimate package and to what extent higher-level management needs to become involved

A specific requirement at the time of final estimate package submittal to the DOCO is that the project administrator determined final quantities have been submitted to the contractor and pertinent subcontractors for their early review. Every effort should be made at the resident level to resolve disputed quantity issues prior to the offer of final payment to the contractor. The DFEO has developed a DFEO Final Estimate Submittal Check List (see **Appendix G**) as a guide to a complete final estimate package submittal and this Check List is to be submitted with the final estimate package. In addition, submit a completed **Final Plans and Estimate Transmittal (DOT Form 700-050-20** (see **Appendix H**).

Submittal to DOCO of original source documents is required unless a scanned document is procedurally acceptable.

VIII. AUDIT CLOSE OUT

If corrections to the Final Estimate package are required, the project administrator will make the corrections and return the Final Estimate documents to the RFES. The RFES shall check the corrections and initial the changes. Prior to submittal of the Final Estimate package, the RFES shall perform a final review of failing materials, pay reductions, liquidated damages, bonus or incentive/disincentive payments and overruns and underruns.

IX. ADMINISTRATIVE CLOSE OUT

Following the audit close out, the correct and complete final estimate package is passed to the DOCO who will:

X Verify outstanding supplemental agreements, claims or other pending legal actions.

X Update and produce the estimate for In-House projects.

X Review CCEI projects.

X Produce the letters of submittal for In-House projects..

X Submit Offer of Final Payment to contractor for In-House projects.

X Process Regular and Qualified Pass packages.

X Assemble and forward document packages to the Department's Comptroller, District Federal Program Coordinator, and JPA Coordinator, if appropriate. These functions are done electronically by scanning the packages and forwarding to the appropriate individuals via Email.

X Update the Final Estimate Status Report, Sitemanager, and PAP.

X Assemble the construction project records for storage or scanning. After pay off, either submit construction project records to District Archives for proper retention period or scan records, whichever is applicable. Process Final As-Built Plans, shop drawings, etc. per the Final Estimates Preparation and Documentation Manual, Chapter 4 (Final Plans) and the Records Retention procedure.

X Store DCE project files and DOCO Estimate Job File at the District Records Storage area per the Records Retention procedure. If scan job, scan records per current procedure and dispose of originals, if appropriate.

PROJECT AUDIT TRANSMITTAL (D5)

FIN #:_____ **CONTRACT #:** _____

AUDIT TYPE:

RFEO Checker

RFEO performs a comprehensive check of all items for procedural compliance and mathematical errors. Overview Auditor reviews selected changes and spot-checks troublesome items.

Risk-Based, DFEO Auditor

DFEO auditor performs a review of Earthwork, Asphalt, Concrete, Penalties and any problem areas.

Place Inside Cover Of Comp Book

Red: RFEO CHECKER **Blue: DFEO AUDIT** **Green: DFEM AUDIT**

	RFEO CHECKER Date:_____	DFEO AUDIT Date: _____	DFEM Date: _____
Auditor's Pencil Color	RED	BLUE	GREEN
Initials			
Printed Name			
Signature			
Final Estimate Sheet Unit Prices verified from contract			

Note: This document is in lieu of Chapter 4.2.4, FERAM.

October 2006

Final Estimates Guide List

I. DFEO Pre-Kickoff Meeting (Optional)

1. Conduct pre-review meeting as needed per the Review and Administration Manual (R&AM, Chapter 4)

2. Agenda Items:

   A. Sign in sheet (list name, position and company name)

   B. Field/Construction Office documents

      1. Dot Manuals:

         a) Preparation & Documentation Manual (P&DM)

         b) Review and Administration Manual (R&AM)

         c) Basis of Estimates Handbook (BOE)

         d) Computation Methods for Design, Construction & Final Estimates Handbook (CMDCFE)

         e) Construction Project Administration Manual (CPAM)

         f) Current specification book pertaining to the project

         g) Roadway and Traffic Design Standards.

   C. District's QC Plan

   D. Computation Book (original) (P&DM, Chapter 5)

   E Computation book pay item summary sheets (P&DM, Chapter 5)

   F. Final Estimates Guide List

   G. Job Guide Schedule

   H. Daily Ledger/computer programs.

   I. Original Plans (P&DM, Chapter 4)

   J. Contract & Special Provisions

   K. The ENGMENU/Other Computer Program

   L. Core-out Work Sheet Instructions

M. Contract Time Folder (P&DM, Chapter 3)

N. Sample Pavement Report Numbering

O. Field Book Log (P&DM, Chapter 6)(Optional)

P. Minimum Field Records for Earthwork (P&DM, Chapter 8)

3. Review the requirements of the following:

A. District's QC Plan

B. Contract Time/Specs/Folder (P&DM, Chapter 3)

C. Contract and Special Provisions: (New Specs)

1. Section 109 – Engineers Field Office (effective 1/2003).

2. 430-12.5 of the Supplemental Specifications (effective 1/2003).

3. Article 125-11 of the Supplemental Specification (effective 1/2003).

D. Computation Book (all pay items have a comp page or a plan matrix, designer backup calculations available and acceptable) (P&DM, Chapter 5).

E. All MOT Items/night work (Specifications)

1. Contractor Certification of Quantities, signs, etc, using form # 700-050-62 (effective 1/2003).

2. Sub-articles 102-11.14 and 102-11.15; Advance Warning Arrow Panel and Changeable (variable) Message sign – minimum 5 day (effective 1/2003).

3. Contractors Certification of Quantities, Painted Pavement Markings: two forms: Work Sheet form # 700-050-67, and the monthly Certification Sheet, form # 700-0509-68.

F. Off-Duty Police Officer (P&DM, Chapter 7).

1. Contractor Certification of Quantities, using form # 700-050-62 (effective 1/2003).

G. Bridge Items (R&AM, Chapter 11)

H. Drainage Structures (R&AM, Chapter 11)

I. Asphalt Items (Bituminous Material, Superpave Asphalt, Misc. Asphalt, Friction Courses, Penalties, thickness adjustment, etc.) (P&DM, Chapter 9)

1. Item 341 Asphalt Rubber Membrane Interlayer will be plan quantity effective July 2003.

2. Contractor's Certification of Quantities forms for tack and prime. Supply contractor with the following forms: 700-050-63 bituminous materials – Lump Sum projects. Form 700-050-64 bituminous material, Tack or Prime coats- conventional projects, and form 700-050-65, bituminous material- on Design-Build Projects (let in 1/2003 through 6/2003)), and form 700-050-66, Contractor's Certification of Quantities Asphalt and Bit on Conventional Projects for jobs let beginning July 2003 (this form is for all asphalt quantities produced and accepted on the job).

3. Tack will be included in the price of asphalt items (articles affected are 234, 300,334,337, & 339), and prime coat will be included in the cost of base items (articles affected are 200, 210, 220, 230, 250, 260 & 300). There will be no bituminous adjustment for tack or prime coat after July 2003.

4. Contractor Certified Quantities showing Tons/M Tons or Gallons/ Liters verified.

5. Asphalt Contractor Quality Control (a.k.a. QC 2000):

    a. Tonnage verified by Project Administrator or designee. (P&DM Chapter 9).

    b. Composite Pay Factor Worksheet attached to Quality Control Reports along with Asphalt Ticket Packets submitted with Final Estimate Package. (P&DM Chapter 9).

    c. Adjusted unit price for Composite Pay Factor Worksheet based on original bid unit price. (P&DM Chapter 9, and Construction memo dated 28/2002).

    d. Contractor's Certification of Quantities for asphalt items submitted with Final Estimates Package. (Specifications effective July 2003).

    e. All documentation provided for project certification to the Materials Office.

J. Earthwork Pay items (Discuss Waiver, Excavation, Embankment, Ponds etc.) (P&DM, Chapter 8)

K. Any Plan Quantity Items. (P&DM, Chapter 7)

L. Final Estimates Record Keeping (P&DM Chapter 6)

M. No work outside project limits/exceptions. (Specifications)

N. Using a monthly sample status progress report to track open samples and get resolution. (CQR)(LIMS in Sitemanager)

O. Contract Plans (P&DM, Chapter 4)

P. Piling & Payment (if applicable) (Specifications)

Q. New Specifications or Alternative Contract (A+B) (QC 2000) (if applicable)

4. DFEO's Periodic Review Process/Schedules (Statewide QC Plan)

5. All documents scanned in Construction Document Management System (CDMS).

6. Agenda Minutes.

Problems Found on PAR's

1. **Final As-Built Plans:** Revised plan sheets that were not made by the EOR is required to be signed and sealed by the responsible Professional Engineer per Prep and Doc Manual 4.5.7.

2. **As-Built Plans:** As-built pavement data sheets are to be inserted into the as-built plans behind the typical section that they represent. (P&D 4.5.10)

3. **Plan Quantity Pay Items:** Several plan quantity pay items were measured due to plan errors. A plan quantity item is not to be measured to verify quantity. "When an error is found, it shall be corrected with proper documentation and references made to location" (per P&DM Chap 2 & 7 and Specification 9-3.2).

4. **102-14 Traffic Control Officer:** Only 3 hours were recorded and paid. Per 102-11.2 Spec. (pg. 113) there is a 4 hour minimum per day.

5. **102-14 Traffic Control Officer:** When a contract is in liquidated damages this Item is allowed pay after last allowable day of contract.

6. **Embankment (2120-6):** The original quantity turned in was 105,597 M3; you had -4,091 M3 subsoil that you failed to deduct from the Embankment. The final quantity should have been 101,506 M3. This error was found by the consultant after the estimate had been submitted to Final Estimates Office. Making a -4,091 M3 x $2.88 = -$11,782.08 Overpayment. The FES sheet was changed out in the Comp Book after submittal by the consultant. The consultant has been advised that FES sheets are not to be changed out but are to be corrected, initialed and dated.

7. **Borrow (120-2-2):** Need a list of the trucks with assigned numbers and their certified capacity. (See P&DM 6.3.1) Capacity on tally sheets do not reflect certified capacity on list.

8. **285-701 (Optional Base Group 01):** Could not locate the cores or the thickness adjustment for the optional base per Specifications 285-6.

9. **Base Optional (Group 06) (2285-706):** Did not core per Specification 285-6. Project Administrator does not have the authority to waive Specifications.

10. **Optional Base (Thickness Adjustments):** When calculating the base thickness adjustments you need to let decimal float on calculator. (6.20 – 6.00 / 6.00 = .033333333) see example in Prep & Doc Manual 9.7.1.

11. **285704 Base Optional (Group 4) CPF 98%:** No CPF adjustment was made on original estimate. Needed to apply a 98% CPF on square yards for this Lot.

12. **285712 (Base Optional) (Base Group 12):** You showed no thickness adjustment for cores on this item. The Base was less than the specified thickness. Per Section 200-10.2 of the Specs. An adjustment will be made if thickness is plus or minus of the specified thickness.

10/23/2006

Problems Found on PAR's

13. **285715 Base Optional (Group 15) Spread Rate Adj:** No spread rate adjustment was done on original estimate.

14. **285715 Base Optional (Group 15) Resolution Cost Adj:** No resolution cost adjustment was done on original estimate.

15. **327-70-5 Milling, Existing Asphalt Pavt (2" Avg Depth):** This is a plan quantity item. The original quantity was 1822 SY and the quantity paid was 1953 SY. Field documentation shows different dimensions than the plans. No analysis was shown if the revised quantity was a plan error or field change.

16. **2327-70-040 Milling Existing Asphalt Pavt (40mm Avg Depth):** This is a plan quantity item. A field change was made and all of the milling was measured. Only the areas that were changed require measuring (P&D Manual 7.3.1 [G]).

17. **334-1-13 Super Pave Asphalt:** A DDM for Lot #14 called for removal and replacement of the 310.25 tons, R2, Station 205+76 to 228+95 and 249+85 to 259+45. You showed the 310.25 tons removed from lot 14 package but did not show in what lot it was replaced in. Your asphalt summary does not reflect the deduction, but you did deduct the 310.25 tons when you paid on the FES.

    The proper procedure per the Prep and Doc Manual is to mill out and replace the asphalt from station to station and the tons it takes to fill the area removed is to be deducted from the original lot package and in remarks state what lot the correction was made in and show on the report what lot the correction is being made on. The asphalt tonnage that was placed in the area is to be incorporated into the new lot and paid under the new CPF. (SEE CHAPTER 9 OF PREP & DOC MANUAL)

    The actual tonnage removed from Lot 14 was 227.78 Tons this made an underpayment on lot 14 (310.25 – 227.78 = 82.5 Tons x $50.4000 = +$4158.00 Underpayment). The 227.78 Tons was replaced in Lot #16 and was shown as waste but needed to be included into the lot (227.8 Tons x $55.4400 = +$12,629.23 Underpayment).

18. **334-1-13 Superpave Asphaltic Conc. (Traffic C):** DDM for Lot 1 states that from Sta. 216+50 to Sta. 226+50 was to be removed and replaced. Lot 6 Road Report, dated 5/6/05, shows the area being removed and replaced for Lot 1 from Sta. 216+47 to Sta. 223+87. This area is not equivalent to the area stated in the DDM.

19. **334-1-13 Superpave Asphaltic Conc (Traffic C):** Asphalt road reports have two targets shown on one report. A separate report should be made any time you are running different spread rates. The average spread rate for that day's run does not reflect what was really going on.

20. **337-7-6 Asphalt Conc Friction Course (FC-12.5) (FC-6):** No deduct on original final estimate turned in for tonnage being over 105% of set spread rate.

Problems Found on PAR's

21. The asphalt plant pay factor worksheet has incorrect tons entered into the space for tons requiring no density for Lots 5, 10, 12, 13 & 14. This did not effect the final outcome for the CPF on Lots 5, 10, 13 & 14 but Lot 12 it changed the CPF from 0.99 to 0.98. This made an over payment of -$1,214.00.

22. Final Estimate was turned in without showing penalties or adjustments on the Computation Book Pay Item Summary Sheet making Comp Book Final Quantity off by a +$17,558.15. (Structural Asphalt) 0.93 CPF = -$1,835.82, 0.95 CPF = -$1,421.00, 1.03 CPF = +11,331.57, 1.04 CPF = +$4,547.20 and 1.05 CPF = +$17,052.00. (FC-5) 0.96 CPF = -$5,783.20, 0.97 CPF = -$4,337.40 and Straight Edge Penalty = -$1,995.20.

23. **337-7-6 Asphalt Conc Friction Course (FC-12.5) (FC-6) (Str. Edge Penalty):** No deduct on original final estimate for straight edge penalty.

24. **Asphalt Friction Course (FC-6) (337-7-6):** The unit price adjustments are not carried to four (4) decimal places as stated in the Prep and Doc Manual, Chapter 9 Section 9-12.5.

25. **Asphalt Conc. Friction (FC-5) (337-7-5):** Need copy of Pre-paving minutes with set spread rate.

26. **Contractor's Asphalt Certification:** The total tonnage that was paid does not match what the contractor has certified.

27. **522-2 Sidewalk Concrete (6"):** This is a PQ Item! You re-measured the entire side walk. Only changed areas are to be measured.

28. **999-16 Partnering:** The invoice submitted is $3,408.67. You paid a % of the original unit price, .142 @ $24,000.00 = $3,408.00. This is an adjustable item! You need to zero out the original item and pay under a new adjusted item 999-16 @ 1 LS @ $3,408.67.

29. **999-20 Disputes Review Board:** The invoice submitted is 14 DA for 3 members @ $3,300.00 per day and 2 days with only 2 members making a total of $50,600.00. You paid a % of the original unit price, 15.334 DA @ $3,300.00 = $50,602.20. This is an adjustable item! You need to pay 14 DA at the original price of $3,300.00 = $46,200.00 and pay under a new adjusted item 999-20 @ 2 DA @ $2,200.00. This makes a total payment of $50,600.00.

30. **Initial Contingency and Contingency's:** Need to list each W.O. Separately as an adjustment item to the original Contingency, on the Final Estimate Summary sheet. Do not pay under the Original pay item. Show a short description and also distinguish between Fed Participating and Non-Fed Participating on the FES sheet.

for the Lot that produced the replacement tonnage with explanation in the remarks column referencing this material to Lot #3.

9-13 DOCUMENTATION FOR MULTIPLE FINANCIAL IDENTIFICATION NUMBERS (FIN) UNDER ONE CONTRACT

All asphalt produced and accepted for a particular item shall be reported under the lead FIN project number (See exception below). The quantities for each FIN number will be determined by the Project Administrator, as the prorated amount determined from the Trns*port Estimated System (TES) pay item breakout. This will be done by taking the total tons shown on the TES for each FIN number and dividing it by the total tons for the contract, then multiplying this amount by the total tons placed. This shall be done **monthly** after the estimate cutoff day based on the Contractor's Certification of Quantities, if asphalt has been placed during the month and paid accordingly on the monthly progress estimate.

Note: This breakout is done monthly to ensure the fuel and bituminous adjustments are correctly adjusted for the period the asphalt was produced and accepted. The CPF breakout adjustments shall be done during the month when the Lot is closed out.

Example

Project "A" TES shows 10,000 tons
Project "B" TES shows 20,000 tons
Total TES for contract = 30,000 tons

Tons placed this month = 4,359 tons

Project "A" would be determined by dividing 10,000 by 30,000 and multiplying by 4,359.
10,000 ÷ 30,000 = .33 X 4,359 = 1,438.47 or 1,438.50 tons

Project "B" would be determined by dividing 20,000 by 30,000 and multiplying by 4,359.
20,000 ÷ 30,000 = .67 X 4,359 = 2,920.53 or 2,920.50 tons

Total = 1,438.5 + 2,920.5 = 4,359 tons.

Exception

When an item is shown only on one FIN number, those tons will be reported on that FIN number.

9-14 DOCUMENTATION FOR MULTIPLE FINANCIAL IDENTIFICATION NUMBERS (FIN) UNDER ONE CONTRACT INCLUDING NON-FEDERAL AID (NFA) PARTICIPATING

All asphalt produced and accepted for a particular item shall be reported under the lead FIN project number including NFA participating (See exception below). The quantities for each FIN number will be determined by the Project Administrator, as the prorated amount determined from the Trns*port Estimated System (TES) pay item breakout. This will be done by taking the total tons shown on the TES for each FIN number and dividing it by the total tons for the contract, then multiplying this amount by the total tons placed. This shall be done **monthly** after the estimate cutoff day based on the Contractor's Certification of Quantities, if asphalt has been placed during the month and paid accordingly on the monthly progress estimate.

Example

Project "A" TES shows 6,000 tons Federal Aid (FA) participating and 4,000 tons NFA participating
Project "B" TES shows 20,000 tons Federal Aid participating
Total TES for contract = 30,000 tons

Tons placed this month = 4,359 tons

Project "A" (FA) would be determined by dividing 6,000 (FA) by 30,000 and multiplying by 4,359.
(FA) 6,000 ÷ 30,000 = .20 X 4,359 = 871.80

Project "A" (NFA) would be determined by dividing 4,000 (NFA) by 30,000 and multiplying by 4,359.
(NFA) 4,000 ÷ 30,000 = .13 X 4,359 = 566.67 or 566.70 tons

Project "B" would be determined by dividing 20,000 by 30,000 and multiplying by 4,359.
(FA) 20,000 ÷ 30,000 = .67 X 4,359 = 2,920.53 or 2,920.50 tons

Total = 871.8 + 566.7 + 2,920.5 = 4,359 tons.

Exception

When an item is shown only on one FIN number, those tons will be reported on that FIN number.

9-15 CPF DOCUMENTATION FOR MULTIPLE (FIN) UNDER ONE CONTRACT

All CPF's for asphalt produced and accepted for a particular item shall be reported under the lead FIN project number (See exception below). The quantities for each FIN number will be determined by the Project Administrator, as the prorated amount determined from the Trns*port Estimated System (TES) pay item breakout. This will be done by taking the total tons shown on the TES for each FIN number and dividing it by the total tons for the contract, then multiplying this amount by the total tons placed for each CPF. This shall be done during the month the Lot is closed out and paid accordingly on the monthly progress estimate.

Example

Project "A" TES shows 10,000 tons
Project "B" TES shows 20,000 tons
Total TES for contract = 30,000 tons

Tons placed = 31,500 tons*

CPF @ 105% = 8,000 tons
CPF @ 102% = 20,000 tons
CPF @ 98% = 3,500 tons

Project "A" would be determined by dividing 10,000 by 30,000 and multiplied by the total tons for each CPF.
10,000 ÷ 30,000 = .33
CPF @ 105% = 8,000 X .33 = 2,640.00 tons
CPF @ 102% = 20,000 X .33 = 6,600.00 tons
CPF @ 98% = 3,500 X .33 = 1,155.00

Project "B" would be determined by dividing 20,000 by 30,000 and multiplied by the total tons for each CPF.
20,000 ÷ 30,000 = .67
CPF @ 105% = 8,000 X .67 = 5,360.00 tons
CPF @ 102% = 20,000 X .67 = 13,400.00 tons
CPF @ 98% = 3,500 X .67 = 2,345.00 tons

Total CPF @ 105% = 2,640 + 5,360 = 8,000 tons
Total CPF @ 102% = 6,600 + 13,400 = 20,000 tons
Total CPF @ 98% = 1,155 + 2,345 = 3,500 tons

Note: This may be done on Federal Aid participating and Non Federal Aid participating projects. These pro-rated amounts shall be shown in the computation booklet along with the calculations.

Note: for this example, 31,500 Tons placed by Contractor is 105% maximum of the original Contract quantity, which is allowed per Specifications. See next example for the maximum pay.

Exception

When an item is shown only on one FIN number, those tons will be reported on that FIN number.

9-16 OVERALL SPREAD RATE ADJUSTMENT FOR MULTIPLE (FIN) UNDER ONE CONTRACT –105% MAX PAY

This shows an example of a105% Overall Adjustment Spread Rate on a multi fin project, how to calculate and separate quantities under the two projects.

Example:

Project "A" TES shows 13,754.2 Tons and 172,559 SY
Project "B" TES shows 91.1 Tons and 1,063 SY
Total TES for Contract = 13,845.3 Tons
Total TES for Contract = 173,622 SY Area
Design Spread Rate = 167.3 Lbs/SY
Specification show Friction Course gets a maximum of 105% from design spread rate which = 175.7 Lbs/SY (max. allowed)

Project "A" overall adjustment would be determined by:
(13,754.2 ÷13,845.3) = 0.99 out of total Contract, and
Project "B" overall adjustment would be determined by:
(91.1 ÷13,845.3) = 0.01 out of total Contract

However, 15,281.2 Tons is the total Tons placed by Contractor on the road, But we need to calculate the maximum Tons that could be placed, as follows:

(175.7 Lbs/SY X 173,622 SY) ÷ 2000 Lbs/Tons = 15,252.7 Tons
So 15,252.7 Tons is maximum that could be placed

Now we can calculate the total deduction and the deduction on each project (because we could only pay up to 105% maximum and since contractor placed more tonnage than what maximum tonnage should be, there will be a deduction), and this is done as follows:

15,252.7 Tons – 15,281.2 Tons = - 28.5 Tons Total deduct

Therefore:

For Project "A" -28.5 X 0.99 = -28.2 Tons deduct and
For project "B" -28.5 X 0.01 = - 0.3 Tons deduct

The deduction under each project is from the original contract amount and unit price at 100%.

Also, if you had a CPF Adjustment, you would either deduct or add (depending on the factor) from the last CPF adjustment. Example: if the CPF =102% (or 0.02) and the last lot was 4000 Tons; unit price = $ 5.00;

0.02 X $ 5.00 = + $ 0.10 (New Unit Price)

For project A: + $ 0.10 X - 28.2 = - $ 2.82 deduct, and
For project B: + $ 0.10 X -0.3 = - $ 0.03 deduct

9-176 CERTIFICATION OF QUANTITIES SUBMITTAL

The Contractor is required to fill out, sign and submit a ***Certification of Quantities*** form to the Project Administrator for payment. This form is furnished by the Department (Form No. 700-050-66 See Attachment 9-7) and is required to be turned in by the Contractor on a monthly basis. This form will show all the asphalt that was produced, accepted and will be reported on the lead FIN project number. The Contractor will only show the tons that were accepted for the eContract. The Department will apply the Composite Pay Factor adjustment as defined above, after the Lot is closed out and the Lot Submittal Package is received and verified. The Project Administrator will keep a running total of each item's tonnage for the period represented and compare these to the ***Certification***. Any discrepancies shall be resolved before authorizing payment on the progress estimate. These ***Certifications*** are to accompany the Final

If the Resolution Technician's results favor the Verification Technician's results, then use the Resolution Technician's results.

Note: The cost of the resolution testing, if performed by the Department and favors the Verification Technicians results, will be deducted from the Contractor on the next progress estimate (See attachment 9-11a & 9-11b). The cost of the testing can be found at the following URL.

http://www.dot.state.fl.us/statematerialsoffice/quality/programs/qualitycontrol/qcindex.htm

9-12.4 Composite Pay Factor - Excel Spreadsheet

The Verification Technician is responsible for entering the CQC Technician's test results in the Composite Pay Factor spreadsheet to calculate the pay adjustments. These entries shall be done at the closing of a Lot during the life of the contract. It is the responsibility of the Project Engineer or designee to verify that the test results entered by the Verification Technician are correct. Also, all reports shall be affixed to the Composite Pay Factor spreadsheet representing that Lot. See example of Lot Submittal Package (See Attachment No. 9-5 and 9-5a thru 9-5k). These reports along with the asphalt ticket packets shall be collected two working days after the closing of a Lot. The Lot Submittal Package shall be submitted with the Final Estimates Package.

9-12.5 Composite Pay Factor Adjustments

All Contracts shall have a unit price adjustment calculated. The Engineer or designee shall calculate the unit price adjustment and enter the revised unit price adjustment on the monthly/progress estimate along with the tons represented by each lot produced.

These revised unit price adjustments range from 75 per cent to 105 per cent. All lots shall be grouped together for each unit price adjustment.

Example: Lots 2, 3, and 5 were at 101 percent: show the tons represented by these lots on the monthly/progress at the revised unit price for a 101 per cent adjustment and place a brief comment) explaining which lots received the adjustment(s). Composite Pay Factor adjustments in Sitemanager will be handled by adjusting the unit price by the variance percent of the Composite Pay Factor. (See Attachment No 9-10a & 9-10b). Also place a new ***Computation Sheet*** in the ***Computation Booklet*** or break out the percentage adjustments on the original ***Computation Sheet*** for the adjusted item(s) (See Attachment No. 9-4).

Note: Always carry the revised unit price adjustment calculations to four (4) decimal places.

9-12.6 Low Pay Factor Material Documentation

(A) Composite Pay Factors < 80 or ≥ 75

(1) Remove and replace the tonnage in this Lot and pay the Composite Pay Factor represented by the replacement Lot. The original Lot Submittal Package will be explained with remarks as "No Pay".

(2) Obtain an Engineering Analysis, if agreed on by Project Administrator, to determine if material may remain in place and if so, pay the original Composite Pay Factor or remove and replace and pay the Composite Pay Factor represented by the replacement Lot. The original Lot Submittal Package will be explained with remarks as "No Pay" with reference to the new replacement Lot Submittal Package.

Note: The Engineer, at his/her sole option, may perform an evaluation and leave this material in place, apply the Composite Pay Factor for this Lot, or have this material removed and replaced as identified in No. 1 above.

(B) Composite Pay Factor < 75

Remove and replace the tonnage in this Lot and pay the Composite Pay Factor represented by the replacement Lot. The original Lot Submittal Package will be explained with remarks as "No Pay".

(C) Independent Verification Test Failure

This shall be handled as stated above, or in some instances, the Project Manager/Administrator will require removal and replacement of tonnage within a Lot. For this case, **DO NOT CORRECT THE REPORTS**, the reports themselves are reporting what actually happened. This defective asphalt may be a partial sublot, an entire sublot, or even an entire Lot. The Contractor's Quality Control Technician should catch this problem before an entire Lot is placed. The defective asphalt will then be milled and replaced with asphalt within another Lot. This is documented in the "Remarks" area. The Technician will document the tonnage of "acceptable asphalt" that is replacing the defective one that was previously placed. The previous report number and date will also be identified in the "Remarks". The new asphalt will be analyzed in the new Lot and paid for

accordingly. The previous Lot Submittal Package will also be identified in the "Remarks" area showing a deduction of the asphalt in this Lot, and it will be referenced to the new Lot Submittal Package and to where this material was actually produced.

Example

Lot 3 had defective asphalt that the Project Administrator, after concurrence from the District Construction/Bituminous Engineer, required removal and replacement. The Project Manager will identify the area in writing to the Contractor. The Contractor will mill up this defective asphalt at their expense and replace with asphalt from a later Lot. This asphalt will be analyzed in this later Lot and paid based on this later Lot's Composite Pay Factor with remarks identifying the area and replacement tonnage represented. For example, the replacement tonnage equaled 667 tons. The previous Lot submittal package would have a deduction of 667 tons handled in the remarks column and payment deducted at the previous Lot's composite pay factor and referenced to the new Lot Submittal Package in which the replacement tonnage was produced (See attachment 9-6 & 9-6a). The new Lot submittal package in the remarks column will clearly identify that 249 tons produced was needed to replace defective asphalt produced in Lot 3.

(D) Individual Quality Control Test

In some instances an individual QC test will bring the Composite Pay Factor down to either (<80 or ≥75) or <75. The original lot will be paid based on the outcome of the Composite Pay Factor. The Contractor may perform an EAR, if approved by the Project Administrator, to isolate the tonnage that needs removing and the effected material will be deducted from the original Lot Submittal Package with remarks explaining its removal and replacement. The replacement material is to be paid in the Lot Submittal Package at the appropriate Composite Pay Factor for that lots production.

Note: If all material in a sublot is removed and replaced, the QC test for that sublot will be thrown out and the CPF will be based on the remaining QC test results. The VT is to compile a new CPF worksheet based on the remaining tests results, place it in the Lot Submittal Package and "VOID" the original CPF worksheet.

Note: When isolating the tonnage that requires removal, the Project Administrator must evaluate the material between the previous QC test

Computation

Book

Examples

STATE OF FLORIDA, DEPARTMENT OF TRANSPORTATION

COMPUTATION BOOK PAY ITEM SUMMARY SHEET

FORM 700-050-10
CONSTRUCTION
01/04

QUANTITY	UNIT	ITEM NO.	PAY ITEM DESCRIPTION	PAGE NO.	UNIT PRICE	AMOUNT
29,080.000	SY	285 701	BASE OPTIONAL (BASE GROUP 01) 4"Limerock	23.0	$ 9.0000	$ 261,720.00
1,454.000	SY	285 701 A	BASE OPTIONAL (BASE GROUP 01) 4"Limerock Thick Adj	23.0	$ 9.0000	$ 13,086.00
34,300.000	SY	285 701	BASE OPTIONAL (BASE GROUP 01) 4"Limerock	23.1	$ 9.0000	$ 308,700.00
1,715.000	SY	285 701 A	BASE OPTIONAL (BASE GROUP 01) 4"Limerock Thick Adj	23.1	$ 9.0000	$ 15,435.00
29,080.000	SY	285 701	BASE OPTIONAL (BASE GROUP 01) 4"Limerock	23.2	$ 9.0000	$ 261,720.00
502.000	SY	285 701 A	BASE OPTIONAL (BASE GROUP 01) 4"Limerock Thick Adj	23.2	$ 9.0000	$ 4,518.00
29,080.000	SY	285 701	BASE OPTIONAL (BASE GROUP 01) 4"Limerock	23.3	$ 9.0000	$ 261,720.00
-313.000	SY	285 701 A	BASE OPTIONAL (BASE GROUP 01) 4"Limerock Thick Adj	23.3	$ 9.0000	-2,817.00
1,329.000	SY	285 709	BASE OPTIONAL (BASE GROUP 09) 6"Asph	24.0	$ 21.7000	$ 28,839.30
1,329.000	SY	285 709 A	BASE OPTIONAL (BASE GROUP 09) 6"Asph Lot 1 CPF 99%	24.0	-0.2170	-288.39
1,329.000	SY	285 709 B	BASE OPTIONAL (BASE GROUP 09) 6"Asph Spread Rate Adj	24.0	$ 1.0850	$ 1,441.97
1,329.000	SY	285 709	BASE OPTIONAL (BASE GROUP 09) 6"Asph	25.0	$ 21.7000	$ 28,839.30
1,329.000	SY	285 709 A	BASE OPTIONAL (BASE GROUP 09) 6"Asph Lot 1 CPF 99%	25.0	-0.2170	-288.39
1,329.000	SY	285 709 B	BASE OPTIONAL (BASE GROUP 09) 6"Asph Spread Rate Adj	25.0	$ 0.7563	$ 1,005.12
1,329.000	SY	285 709	BASE OPTIONAL (BASE GROUP 09) 6"Asph	26.0	$ 21.7000	$ 28,839.30
1,329.000	SY	285 709 A	BASE OPTIONAL (BASE GROUP 09) 6"Asph Lot 1 CPF 99%	26.0	-0.2170	-288.39
1,329.000	SY	285 709 B	BASE OPTIONAL (BASE GROUP 09) 6"Asph Spread Rate Adj	26.0	-0.0588	-78.15
1,329.000	SY	285 709	BASE OPTIONAL (BASE GROUP 09) 6"Asph	27.0	$ 21.7000	$ 28,839.30
1,306.000	SY	285 709 A	BASE OPTIONAL (BASE GROUP 09) 6"Asph Lot 4 CPF 99%	27.0	-0.2170	-283.40
1,306.000	SY	285 709 B	BASE OPTIONAL (BASE GROUP 09) 6"Asph Spread Rate Adj	27.0	$ 0.7563	$ 987.73
23.000	SY	285 709 C	BASE OPTIONAL (BASE GROUP 09) 6"Asph Spread Rate Adj	27.0	$ 0.5345	$ 12.29
4,214.200	TN	334 1 13	SUPERPAVE ASPHALTIC CONC (TRAFFIC C)	28.0	$ 90.0000	$ 379,278.00
2,759.700	TN	334 1 13	SUPERPAVE ASPHALTIC CONC (TRAFFIC C) Lot 2-3 CPF 97%	28.0	-2.7000	-7,451.19
1,004.900	TN	334 1 13	SUPERPAVE ASPHALTIC CONC (TRAFFIC C) Lot 4 CPF 99%	28.0	-0.9000	-904.41
3,343.700	TN	337 7 6	ASPH CONC FRICTION COURSE(INC BIT/RUBBER)FC 12.5(FC-6)	29.0	$ 120.0000	$ 401,244.00
2,000.000	TN	337 7 6 A	ASPH CONC FC(INC BIT/RUBBER)FC 12.5(FC-6) Lot 5 CPF 97%	29.0	-3.6000	-7,200.00
1,343.700	TN	337 7 6 B	ASPH CONC FC(INC BIT/RUBBER)FC 12.5(FC-6) Lot 6 CPF 104%	29.0	$ 4.8000	$ 6,449.76
				PAGE TOTAL		$ 2,013,075.74

STATE OF FLORIDA, DEPARTMENT OF TRANSPORTATION

COMPUTATION BOOK PAY ITEM SUMMARY SHEET

FORM 700-050-10
CONSTRUCTION
06/02

QUANTITY	UNIT	ITEM NO.	PAY ITEM DESCRIPTION	PAGE NO.	UNIT PRICE	AMOUNT
-10.500	TN	337 7 6 C	ASPH CONC FC(INC BIT/RUBBER)FC 12.5(FC-6) Spread Rate Adj	29.0	$ 120.0000	-1,260.00
26.300	TN	339 1	ASPHALT PAVEMENT MISCELLANEOUS	30.0	$ 180.0000	$ 4,734.00
-5.400	TN	339 1 A	ASPHALT PAVEMENT MISCELLANEOUS Spread Rate Adj	30.0	$ 180.0000	-972.00

PAGE TOTAL	$ 2,502.00

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION

AREA COMPUTATIONS

FORM 700-050-01
CADD-FORM1

PAY ITEM NO. 285-701

PAY ITEM DESCRIPTION **BASE OPTIONAL (BASE GROUP 01)**

STATION TO STATION	TRAV. OR PAGE NO.	SIDE	DESIGN ORIGINAL WIDTH	DESIGN ORIGINAL LENGTH	DESIGN ORIGINAL CURVE CORR. (±)	DESIGN ORIGINAL AREA (S.Y. / M2)	DESIGN ORIGINAL REMARKS	CONSTRUCTION FINAL WIDTH	CONSTRUCTION FINAL LENGTH	CONSTRUCTION FINAL AREA (S.Y. / M2)	CONSTRUCTION FINAL REMARKS
										29080	No Error or Change
127+08.50 TO 146+68.00		LT	8	1959.5		1741.8					
146+68.00 TO 380+39.00		LT/RT	10	23371.0		25967.8				+1454	Thick. Adj (see Folder COR-1)
380+39.00 TO 392+72.00		LT/RT	10	1233.0		1370.0					

29079.6	= PAGE TOTAL <
29080 SY	= PROJECT GRAND TOTAL < 30534

If the above item is under the **Plan Quantity Concept**, then the block below must be appropriately filled out.

Plan Quantity Concept Signature Block
Design/Engineers Responsible for Calculations: All support measurements and computations have been included for this Plan Quantity item.

Signature: Thinh Nguyen **Print Name:** Thinh Nguyen

NOTES FOR EXPLANATION OF (OVER) UNDER RUN: Due To Thickness Adj +1454

DATE PROC: 5/25/2006
PROJECT NO. 41160315201
ROAD SR25
COUNTY LAKE
DATA IS IN ENGLISH VALUES ARE IN INCHES

DISTRICT 5
Date 05/24/2006
MIN 3.50 MAX 4.50

STATION	WIDTH	ACTUAL THICKNESS				SPECIFICATION ALLOWANCE			
		LEFT	CENTER	RIGHT	AVERAGE	LEFT	CENTER	RIGHT	AVERAGE
* OPTION BASE 01 4" THICK									
* BEGIN RT SH OR									
147+83	5	4.20			4.20	4.20			4.20
145+72	5		4.50		4.50		4.50		4.50
155+21	5			4.30	4.30			4.30	4.30
158+29	5	3.90			3.90	3.90			3.90
159+32	5		4.50		4.50		4.50		4.50
165+27	5			4.30	4.30			4.30	4.30
169+35	5	4.50			4.50	4.50			4.50
173+79	5		4.50		4.50		4.50		4.50
176+63	5			4.20	4.20			4.20	4.20
178+45	5	4.30			4.30	4.30			4.30
182+15	5		4.70		4.70		4.50*		4.50
186+92	5			4.10	4.10			4.10	4.10
189+65	5	4.20			4.20	4.20			4.20
193+97	5		4.30		4.30		4.30		4.30
195+98	5			4.40	4.40			4.40	4.40
198+74	5	4.20			4.20	4.20			4.20
200+51	5		4.20		4.20		4.20		4.20
206+63	5			4.20	4.20			4.20	4.20
208+71	5	4.20			4.20	4.20			4.20
211+49	5		4.20		4.20		4.20		4.20
213+52	5			4.80	4.80			4.50*	4.50
219+37	5	4.20			4.20	4.20			4.20
223+29	5		4.20		4.20		4.20		4.20
226+54	5			4.20	4.20			4.20	4.20
228+82	5	4.30			4.30	4.30			4.30
232+99	5		4.40		4.40		4.40		4.40
226+57	5			4.20	4.20			4.20	4.20
240+12	5	4.30			4.30	4.30			4.30
243+32	5		4.30		4.30		4.30		4.30
246+41	5			4.40	4.40			4.40	4.40
248+58	5	4.30			4.30	4.30			4.30
250+53	5		4.30		4.30		4.30		4.30
255+61	5			4.30	4.30			4.30	4.30
257+93	5	4.20			4.20	4.20			4.20
261+21	5		4.20		4.20		4.20		4.20
266+48	5			4.20	4.20			4.20	4.20
267+43	5			4.20	4.20			4.20	4.20
270+51	5		4.20		4.20		4.20		4.20
275+49	5			4.30	4.30			4.30	4.30
278+37	5	4.20			4.20	4.20			4.20
280+21	5		4.20		4.20		4.20		4.20
286+85	5			4.20	4.20			4.20	4.20

DATE PROC: 5/25/2006
PROJECT NO. 41160315201
ROAD SR25
COUNTY LAKE
DATA IS IN ENGLISH VALUES ARE IN INCHES

DISTRICT 5
Date 05/24/2006
MIN 3.50 MAX 4.50

STATION	WIDTH	ACTUAL THICKNESS				SPECIFICATION ALLOWANCE			
		LEFT	CENTER	RIGHT	AVERAGE	LEFT	CENTER	RIGHT	AVERAGE
289+12	5	4.30			4.30	4.30			4.30
291+39	5		4.20		4.20		4.20		4.20
296+17	5			4.50	4.50			4.50	4.50
298+34	5	4.70			4.70	4.50*			4.50
300+19	5		4.30		4.30		4.30		4.30
305+97	5			4.30	4.30			4.30	4.30
308+92	5	4.30			4.30	4.30			4.30
310+23	5		4.30		4.30		4.30		4.30
316+47	5			4.30	4.30			4.30	4.30
319+31	5	4.70			4.70	4.50*			4.50
321+58	5		4.60		4.60		4.50*		4.50
325+28	5			4.70	4.70			4.50*	4.50
328+28	5	4.30			4.30	4.30			4.30
331+39	5		4.30		4.30		4.30		4.30
336+51	5			4.30	4.30			4.30	4.30
337+55	5	4.30			4.30	4.30			4.30
340+31	5		4.20		4.20		4.20		4.20
345+48	5			4.30	4.30			4.30	4.30
349+12	5	4.10			4.10	4.10			4.10
342+65	5		4.10		4.10		4.10		4.10
356+93	5			4.30	4.30			4.30	4.30
359+84	5	4.20			4.20	4.20			4.20
361+23	5		4.20		4.20		4.20		4.20
365+47	5			4.20	4.20			4.20	4.20
368+99	5	4.20			4.20	4.20			4.20
370+67	5		4.20		4.20		4.20		4.20
376+81	5			4.20	4.20			4.20	4.20
378+31	5	4.20			4.20	4.20			4.20
380+42	5		4.20		4.20		4.20		4.20
380+77	5			4.10	4.10			4.10	4.10
388+71	5	4.20			4.20	4.20			4.20
389+35	5		4.20		4.20		4.20		4.20
389+48	5			4.30	4.30			4.30	4.30
390+27	5	4.30			4.30	4.30			4.30
390+32	5		4.30		4.30		4.30		4.30
391+43	5			4.30	4.30			4.30	4.30
391+54	5	4.20			4.20	4.20			4.20
391+72	5		4.40		4.40		4.40		4.40
391+98	5			4.40	4.40			4.40	4.40
392+12	5	4.90			4.90	4.50*			4.50
392+54	5		4.30		4.30		4.30		4.30
392+99	5			4.40	4.40			4.40	4.40

* END RT SH OR

* BEGIN LT SH OL

DATE PROC: 5/25/2006
PROJECT NO. 41160315201
ROAD SR25
COUNTY LAKE
DATA IS IN ENGLISH VALUES ARE IN INCHES

DISTRICT 5
Date 05/24/2006
MIN 3.50 MAX 4.50

STATION	WIDTH	ACTUAL THICKNESS				SPECIFICATION ALLOWANCE			
		LEFT	CENTER	RIGHT	AVERAGE	LEFT	CENTER	RIGHT	AVERAGE
387+21	5	4.40			4.40	4.40			4.40
390+59	5		4.40		4.40		4.40		4.40
392+33	5			4.30	4.30			4.30	4.30
374+91	5	4.30			4.30	4.30			4.30
380+24	5		4.40		4.40		4.40		4.40
382+77	5			4.40	4.40			4.40	4.40
365+27	5	4.30			4.30	4.30			4.30
370+48	5		4.40		4.40		4.40		4.40
372+10	5			4.40	4.40			4.40	4.40
354+91	5	4.40			4.40	4.40			4.40
360+53	5		4.30		4.30		4.30		4.30
362+42	5			4.30	4.30			4.30	4.30
345+49	5	4.20			4.20	4.20			4.20
349+03	5		4.20		4.20		4.20		4.20
351+33	5			4.20	4.20			4.20	4.20
333+38	5	4.20			4.20	4.20			4.20
340+77	5		4.20		4.20		4.20		4.20
342+29	5			4.20	4.20			4.20	4.20
324+87	5	4.20			4.20	4.20			4.20
329+17	5		4.20		4.20		4.20		4.20
332+75	5			4.20	4.20			4.20	4.20
315+23	5	4.20			4.20	4.20			4.20
319+44	5		4.20		4.20		4.20		4.20
321+92	5			4.20	4.20			4.20	4.20
304+73	5	4.30			4.30	4.30			4.30
310+27	5		4.30		4.30		4.30		4.30
312+48	5			4.30	4.30			4.30	4.30
295+69	5	4.30			4.30	4.30			4.30
300+21	5		4.30		4.30		4.30		4.30
302+54	5			4.30	4.30			4.30	4.30
285+93	5	4.40			4.40	4.40			4.40
290+01	5		4.80		4.80		4.50*		4.50
292+37	5			4.30	4.30			4.30	4.30
274+45	5	4.20			4.20	4.20			4.20
280+78	5		4.30		4.30		4.30		4.30
281+64	5			4.30	4.30			4.30	4.30
204+52	5	4.30			4.30	4.30			4.30
269+21	5		4.30		4.30		4.30		4.30
271+41	5			4.30	4.30			4.30	4.30
253+97	5	4.30			4.30	4.30			4.30
260+04	5		4.30		4.30		4.30		4.30
262+44	5			4.30	4.30			4.30	4.30
244+35	5	4.20			4.20	4.20			4.20
240+71	5		4.20		4.20		4.20		4.20
252+59	5			4.20	4.20			4.20	4.20
234+87	5	4.20			4.20	4.20			4.20
231+68	5		4.30		4.30		4.30		4.30
242+32	5			4.20	4.20			4.20	4.20

FDOT V4.2.1 03/2003 CORE-OUT AVERAGES PAGE NO 4

DATE PROC: 5/25/2006
PROJECT NO. 41160315201
ROAD SR25
COUNTY LAKE
DATA IS IN ENGLISH VALUES ARE IN INCHES

DISTRICT 5
Date 05/24/2006
MIN 3.50 MAX 4.50

STATION	WIDTH	ACTUAL THICKNESS				SPECIFICATION ALLOWANCE			
		LEFT	CENTER	RIGHT	AVERAGE	LEFT	CENTER	RIGHT	AVERAGE
225+49	5	4.40			4.40	4.40			4.40
229+27	5		4.40		4.40		4.40		4.40
232+95	5			4.60	4.60			4.50*	4.50
215+03	5	4.70			4.70	4.50*			4.50
220+41	5		4.60		4.60		4.50*		4.50
221+31	5			4.50	4.50			4.50	4.50
204+80	5	4.50			4.50	4.50			4.50
211+47	5		4.50		4.50		4.50		4.50
212+00	5			4.50	4.50			4.50	4.50
195+24	5	4.30			4.30	4.30			4.30
200+85	5		4.40		4.40		4.40		4.40
202+76	5			4.40	4.40			4.40	4.40
183+32	5	4.40			4.40	4.40			4.40
190+48	5		4.40		4.40		4.40		4.40
192+21	5			4.60	4.60			4.50*	4.50
175+35	5	4.80			4.80	4.50*			4.50
181+07	5		4.30		4.30		4.30		4.30
182+59	5			4.20	4.20			4.20	4.20
164+30	5	4.70			4.70	4.50*			4.50
169+97	5		5.20		5.20		4.50*		4.50
171+64	5			4.70	4.70			4.50*	4.50
154+78	5	4.60			4.60	4.50*			4.50
160+49	5		4.50		4.50		4.50		4.50
162+52	5			5.30	5.30			4.50*	4.50
143+87	5	4.80			4.80	4.50*			4.50
150+59	5		4.40		4.40		4.40		4.40
151+67	5			4.30	4.30			4.30	4.30
135+00	5	4.20			4.20	4.20			4.20
140+53	5		4.20		4.20		4.20		4.20
142+62	5			4.20	4.20			4.20	4.20
130+02	5	4.40			4.40	4.40			4.40
131+79	5		5.20		5.20		4.50*		4.50
132+45	5			4.80	4.80			4.50*	4.50

* END LT SH OL

JOB AVERAGE	717.20/	165	4.3467	711.20/	165	4.3103

4.3103 ÷ 4.00 = 1.077575 > 1.05
29080 SY × 1.05 = 30534 SY
30534 − 29080 = 1454 SY THICK ADJ

QUALITY CONTROL ROCK BASE THICKNESS

FIN No. 411603-1-52-01
Material No. 405L
Cored By (TIN no.): R36151475

Pay Item No. 285-701
Plan Thickness 4.0"
Date: 5/24/2006

L=1.5 | C=3 | R=4.5 | JAL 5/24/06

Lot	Roadway	Beg. Station	End Station	Core No.	Station No.	Lane	Offset	Roadway Width	Thickness	Mainline Y/N	Compute Y/N	Verified Y/N	Comments
1&2	Rtsh	147+00	157+00	1	147+83 ✓	OR	1.5	5	4.2	Y	Y	Y	
				2	145+72 ✓	OR	3	5'	4.5	Y	Y	Y	
				3	155+21 ✓	OR	4.5	5'	4.3	Y	Y	Y	
3&4	Rtsh	157+00	167+00	4	158+29 ✓	OR	1.5	5'	3.9	Y	Y	Y	
				5	159+32	OR	3	5'	4.5	Y	Y	Y	
				6	165+27 ✓	OR	4.5	5'	4.3	Y	Y	Y	
5&6	Rtsh	167+00	177+00	7	169+35 ✓	OR	1.5	5'	4.5	Y	Y	Y	
				8	173+79 ✓	OR	3	5'	4.5	Y	Y	Y	
				9	176+63 ✓	OR	4.5	5'	4.2	Y	Y	Y	
7&8	Rtsh	177+00	187+00	10	178+45 ✓	OR	1.5	5'	4.3	Y	Y	Y	
				11	182+15 ✓	OR	3	5'	4.7	Y	Y	Y	
				12	186+92 ✓	OR	4.5	5'	4.1	Y	Y	Y	
9&10	Rtsh	187+00	197+00	13	189+65 ✓	OR	1.5	5'	4.2	Y	Y	Y	
				14	193+97 ✓	OR	3	5	4.3	Y	Y	Y	
				15	195+98 ✓	OR	4.5	5	4.4	Y	Y	Y	
11&12	Rtsh	197+00	207+00	16	198+74 ✓	OR	1.5	5	4.2	Y	Y	Y	
				17	200+51 ✓	OR	3	5	4.2	Y	Y	Y	
				18	206+63 ✓	OR	4.5	5	4.2	Y	Y	Y	

200-7.2.2 Frequency	
Quality Control	
Roadway Thickness	Three per LOT
Shoulder / Widening * Thickness	Three per two consecutive LOTs
* Note: for widening less than or equal to 4 ft (1.2m)	

Note: Measure thickness to 0.1 inch (FM 5.534)

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION

AREA COMPUTATIONS

FORM 700-050-01
CADD-FORM1

PAY ITEM NO. 285-701

PAY ITEM DESCRIPTION **BASE OPTIONAL (BASE GROUP 01)**

STATION TO STATION	TRAV. OR PAGE NO.	SIDE	DESIGN ORIGINAL WIDTH	LENGTH	CURVE CORR. (±)	AREA (S.Y./M2)	REMARKS	CONSTRUCTION FINAL WIDTH	LENGTH	AREA (S.Y./M2)	REMARKS
127+08.50 TO 146+68.00		LT	8	1959.5		1741.8		10	1959.5	2177.2	PLAN ERROR +435.4
146+68.00 TO 380+39.00		LT/RT	10	23371.0		25967.8					435÷29080=0.0149=1.5% <5%
380+39.00 TO 392+72.00		LT/RT	10	1233.0		1370.0					435×$12.00=$5220.00? $5000.00
										+435	ADJ PQ.
										29080	
										34300	PAY QUANT.
										+1715	THICK. ADJ (SEE FOLDER COR-1)

29079.6	= PAGE TOTAL <	
29080 SY	= PROJECT GRAND TOTAL <	36015

If the above item is under the **Plan Quantity Concept**, then the block below must be appropriately filled out.

Plan Quantity Concept Signature Block
Design/Engineers Responsible for Calculations: All support measurements and computations have been included for this Plan Quantity item.

Signature: Thinh Nguyen **Print Name:** Thinh Nguyen

NOTES FOR EXPLANATION OF (OVER)/UNDER RUN: DUE TO PLAN ERROR OF +435 SY AND THICKNESS ADJ +1715 SY
EXIST SHOULDER 10' NOT 8'

DATE PROC: 5/25/2006
PROJECT NO. 41160315201
ROAD SR25
COUNTY LAKE
DATA IS IN ENGLISH VALUES ARE IN INCHES

DISTRICT 5
Date 05/24/2006
MIN 3.50 MAX 4.50

STATION	WIDTH	ACTUAL THICKNESS				SPECIFICATION ALLOWANCE			
		LEFT	CENTER	RIGHT	AVERAGE	LEFT	CENTER	RIGHT	AVERAGE
225+49	5	4.40			4.40	4.40			4.40
229+27	5		4.40		4.40		4.40		4.40
232+95	5			4.60	4.60			4.50*	4.50
215+03	5	4.70			4.70	4.50*			4.50
220+41	5		4.60		4.60		4.50*		4.50
221+31	5			4.50	4.50			4.50	4.50
204+80	5	4.50			4.50	4.50			4.50
211+47	5		4.50		4.50		4.50		4.50
212+00	5			4.50	4.50			4.50	4.50
195+24	5	4.30			4.30	4.30			4.30
200+85	5		4.40		4.40		4.40		4.40
202+76	5			4.40	4.40			4.40	4.40
183+32	5	4.40			4.40	4.40			4.40
190+48	5		4.40		4.40		4.40		4.40
192+21	5			4.60	4.60			4.50*	4.50
175+35	5	4.80			4.80	4.50*			4.50
181+07	5		4.30		4.30		4.30		4.30
182+59	5			4.20	4.20			4.20	4.20
164+30	5	4.70			4.70	4.50*			4.50
169+97	5		5.20		5.20		4.50*		4.50
171+64	5			4.70	4.70			4.50*	4.50
154+78	5	4.60			4.60	4.50*			4.50
160+49	5		4.50		4.50		4.50		4.50
162+52	5			5.30	5.30			4.50*	4.50
143+87	5	4.80			4.80	4.50*			4.50
150+59	5		4.40		4.40		4.40		4.40
151+67	5			4.30	4.30			4.30	4.30
135+00	5	4.20			4.20	4.20			4.20
140+53	5		4.20		4.20		4.20		4.20
142+62	5			4.20	4.20			4.20	4.20
130+02	5	4.40			4.40	4.40			4.40
131+79	5		5.20		5.20		4.50*		4.50
132+45	5			4.80	4.80			4.50*	4.50

* END LT SH OL

JOB AVERAGE	717.20/	165	4.3467	711.20/	165	4.3103

4.3103 ÷ 4.00 = 1.077575 > 1.05
34300 x 1.05 = 36015 SY
36015 - 34300 = 1715 SY THICK ADJ

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION

AREA COMPUTATIONS

FORM 700-050-01
CADD-FORM1

PAY ITEM NO. 285-701

PAY ITEM DESCRIPTION **BASE OPTIONAL (BASE GROUP 01)**

STATION TO STATION	TRAV. OR PAGE NO.	SIDE	DESIGN ORIGINAL WIDTH	LENGTH	CURVE CORR. (±)	AREA (S.Y. / M2)	REMARKS	CONSTRUCTION FINAL WIDTH	LENGTH	AREA (S.Y. / M2)	REMARKS
										29080	No Error or Change
127+08.50 TO 146+68.00		LT	8	1959.5		1741.8					
146+68.00 TO 380+39.00		LT/RT	10	23371.0		25967.8				+ 502	Thick. Adj (see Folder COR-1)
380+39.00 TO 392+72.00		LT/RT	10	1233.0		1370.0					

29079.6	= PAGE TOTAL <
29080 SY	= PROJECT GRAND TOTAL < 29582

If the above item is under the **Plan Quantity Concept**, then the block below must be appropriately filled out.

Plan Quantity Concept Signature Block
Design/Engineers Responsible for Calculations: All support measurements and computations have been included for this Plan Quantity item.

Signature: Thinh Nguyen Print Name: Thinh Nguyen

NOTES FOR EXPLANATION OF (OVER)/UNDER RUN: Due to Thick. Adj +502

DATE PROC: 10/18/2006
PROJECT NO. 41160315201 DISTRICT 5
ROAD SR25 Date 05/24/2006
COUNTY LAKE MIN 3.50 MAX 4.50
DATA IS IN ENGLISH VALUES ARE IN INCHES

STATION	WIDTH	ACTUAL THICKNESS				SPECIFICATION ALLOWANCE			
		LEFT	CENTER	RIGHT	AVERAGE	LEFT	CENTER	RIGHT	AVERAGE
225+49	5	4.10			4.10	4.10			4.10
229+27	5		4.00		4.00		4.00		4.00
232+95	5			4.10	4.10			4.10	4.10
215+03	5	4.00			4.00	4.00			4.00
220+41	5		4.10		4.10		4.10		4.10
221+31	5			4.10	4.10			4.10	4.10
204+80	5	4.00			4.00	4.00			4.00
211+47	5		3.90		3.90		3.90		3.90
212+00	5			4.00	4.00			4.00	4.00
195+24	5	4.00			4.00	4.00			4.00
200+85	5		3.80		3.80		3.80		3.80
202+76	5			4.00	4.00			4.00	4.00
183+32	5	4.10			4.10	4.10			4.10
190+48	5		4.00		4.00		4.00		4.00
192+21	5			4.20	4.20			4.20	4.20
175+35	5	4.20			4.20	4.20			4.20
181+07	5		4.10		4.10		4.10		4.10
182+59	5			4.20	4.20			4.20	4.20
164+30	5	4.10			4.10	4.10			4.10
169+97	5		4.00		4.00		4.00		4.00
171+64	5			4.00	4.00			4.00	4.00
154+78	5	4.10			4.10	4.10			4.10
160+49	5		4.00		4.00		4.00		4.00
162+52	5			3.90	3.90			3.90	3.90
143+87	5	3.90			3.90	3.90			3.90
150+59	5		4.00		4.00		4.00		4.00
151+67	5			4.10	4.10			4.10	4.10
135+00	5	4.20			4.20	4.20			4.20
140+53	5		4.20		4.20		4.20		4.20
142+62	5			4.20	4.20			4.20	4.20
130+02	5	4.10			4.10	4.10			4.10
131+79	5		4.10		4.10		4.10		4.10
132+45	5			4.00	4.00			4.00	4.00

* END LT SH OL

JOB AVERAGE	671.60/	165	4.0703	671.40/	165	4.0691

4.0691 ÷ 4.00 = 1.017275 < 1.05
29080 SY x 1.017275 = 29582.357
29582 - 29080 = 502 SY THICK ADJ

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION

AREA COMPUTATIONS

FORM 700-050-01
CADD-FORM1

PAY ITEM NO. 285-701

PAY ITEM DESCRIPTION **BASE OPTIONAL (BASE GROUP 01)**

STATION TO STATION	TRAV. OR PAGE NO.	SIDE	DESIGN ORIGINAL WIDTH	LENGTH	CURVE CORR. (±)	AREA (S.Y. / M2)	REMARKS	CONSTRUCTION FINAL WIDTH	LENGTH	AREA (S.Y. / M2)	REMARKS
										29080	NO ERROR OR CHANGE
127+08.50 TO 146+68.00		LT	8	1959.5		1741.8					
146+68.00 TO 380+39.00		LT/RT	10	23371.0		25967.8				-313	THICK. ADJ (SEE FOLDER COR-1)
380+39.00 TO 392+72.00		LT/RT	10	1233.0		1370.0					

29079.6	= PAGE TOTAL <	
29080 SY	= PROJECT GRAND TOTAL <	28767

If the above item is under the **Plan Quantity Concept**, then the block below **must** be appropriately filled out.

Plan Quantity Concept Signature Block
Design/Engineers Responsible for Calculations: All support measurements and computations have been included for this Plan Quantity item.

Signature: Thinh Nguyen Print Name: Thinh Nguyen

NOTES FOR EXPLANATION OF OVER/(UNDER) RUN: DUE TO THICK ADJ -313

FDOT V4.2.1 04/2006 CORE-OUT AVERAGES PAGE NO 4
DATE PROC: 10/18/2006
PROJECT NO. 41160315201 DISTRICT 5
ROAD SR25 Date 05/24/2006
COUNTY LAKE MIN 3.50 MAX 4.50
DATA IS IN ENGLISH VALUES ARE IN INCHES

STATION	WIDTH	ACTUAL THICKNESS				SPECIFICATION ALLOWANCE			
		LEFT	CENTER	RIGHT	AVERAGE	LEFT	CENTER	RIGHT	AVERAGE
225+49	5	3.90			3.90	3.90			3.90
229+27	5		4.00		4.00		4.00		4.00
232+95	5			3.90	3.90			3.90	3.90
215+03	5	4.00			4.00	4.00			4.00
220+41	5		4.00		4.00		4.00		4.00
221+31	5			4.00	4.00			4.00	4.00
204+80	5	4.00			4.00	4.00			4.00
211+47	5		3.90		3.90		3.90		3.90
212+00	5			4.00	4.00			4.00	4.00
195+24	5	4.00			4.00	4.00			4.00
200+85	5		3.80		3.80		3.80		3.80
202+76	5			4.00	4.00			4.00	4.00
183+32	5	3.90			3.90	3.90			3.90
190+48	5		4.00		4.00		4.00		4.00
192+21	5			3.90	3.90			3.90	3.90
175+35	5	3.90			3.90	3.90			3.90
181+07	5		3.90		3.90		3.90		3.90
182+59	5			4.00	4.00			4.00	4.00
164+30	5	3.90			3.90	3.90			3.90
169+97	5		4.00		4.00		4.00		4.00
171+64	5			4.00	4.00			4.00	4.00
154+78	5	3.90			3.90	3.90			3.90
160+49	5		4.00		4.00		4.00		4.00
162+52	5			3.90	3.90			3.90	3.90
143+87	5	3.90			3.90	3.90			3.90
150+59	5		4.00		4.00		4.00		4.00
151+67	5			3.90	3.90			3.90	3.90
135+00	5	3.90			3.90	3.90			3.90
140+53	5		3.90		3.90		3.90		3.90
142+62	5			3.80	3.80			3.80	3.80
130+02	5	3.80			3.80	3.80			3.80
131+79	5		3.90		3.90		3.90		3.90
132+45	5			3.90	3.90			3.90	3.90

* END LT SH OL

JOB AVERAGE	652.40/	165	3.9539	652.20/	165	3.9527

3.9527 ÷ 4.00 = 0.98925 < 1.05
29080 SY x 0.98925 = 28767.39
28767 - 29080 = -313 THICK. ADJ

STATE OF FLORIDA, DEPARTMENT OF TRANSPORTATION

AREA COMPUTATIONS

FORM 700-050-01
CONSTRUCTION
06/02

PAY ITEM NO. 0285709

PAY ITEM DESCRIPTION BASE OPTIONAL (BASE GROUP 09)

STATION TO STATION			TRAV. OR PAGE NO.	SIDE	DESIGN ORIGINAL					CONSTRUCTION FINAL			
					WIDTH	LENGTH	CURVE CORR(+/-)	AREA (SY)	REMARKS	WIDTH	LENGTH	AREA (SY)	REMARKS
16+35.98	-	31+16.23						1,184.8					No Error or Change
12+62.35	-	12+74.43						27.9				1329	Total SY @ 100%
15+20.01	-	15+60.09						90.2					See Folder ADM-1 for
17+07.63	-	17+56.61						26.3					Asph. Summary
												1329	Lot 1 @ 99% CPF
													See Pg 24.1 for
													Spread Rate Adj
													1329 SY @ $1.085

1,329	< PAGE TOTAL >	
1,329	< PROJECT GRAND TOTAL >	1329

If the above item is under the **Plan Quantity Concept**, then the block below must be appropriately filled out.

Plan Quantity Concept Signature Block
Design Engineers Responsible for Calculations: All support measurements and computations have been included for this Plan Quantity item. **Signature:** _____ **Print Name:** _____

NOTES FOR EXPLANATION OF OVER/UNDER RUN

Given:				
Plan Quantity	=	1329	SY	Make sure u enter these righ
Final Quantity	=	1329	SY	
FQ-PQ	=	0	SY	If PQ item, is this a ch or err
Final tons	=	593.26	TN	
Unit price	=	21.7	$	
Typ Sec SR lbs/sy	=	6	in	
Design Mix gmm	=	2.328	gmm	Be sure to plug in the correc
job lbs	=	100.8		
Lift thickness	=	3	in	

Results:			
Specified SR	=	604.8	lbs
Avg Daily SR	=	302.4	lbs/sy w/in +/- 5%
Proj Avg SR	=	892.79	lbs/sy
Max SR allowed	=	635.04	lbs/sy
P. avg sr/sp sr	=	1.476173942	a ratio
Add thick adj item	=	$10.3330	adjusted unit price
FQ x adj unit price	=	$13,732.56	Dollar am't of adjustment

Condition: If cell d19 > than 1.05, pay 1.05 max

1.05	the max ratio	
$1.0850	adjusted unit price	
$1,441.97	Dollar am't of adjustment	

STATE OF FLORIDA, DEPARTMENT OF TRANSPORTATION

AREA COMPUTATIONS

FORM 700-050-01
CONSTRUCTION
06/02

PAY ITEM NO. 0285709

PAY ITEM DESCRIPTION BASE OPTIONAL (BASE GROUP 09)

STATION TO STATION			TRAV. OR PAGE NO.	SIDE	DESIGN ORIGINAL					CONSTRUCTION FINAL			
					WIDTH	LENGTH	CURVE CORR(+/-)	AREA (SY)	REMARKS	WIDTH	LENGTH	AREA (SY)	REMARKS
16+35.98	-	31+16.23						1,184.8					No Error or Change
12+62.35	-	12+74.43						27.9				1329	Total SY @ 100%
15+20.01	-	15+60.09						90.2					See Folder ADM-1 for
17+07.63	-	17+56.61						26.3					Asph. Summary
												1329	Lot 1 @ 99% CPF
													See Pg 25.1 for
													Spread Rate Adj
													1329sy @ $0.7563

1,329	< PAGE TOTAL >	
1,329	< PROJECT GRAND TOTAL >	1329

If the above item is under the **Plan Quantity Concept**, then the block below must be appropriately filled out.

Plan Quantity Concept Signature Block
Design Engineers Responsible for Calculations: All support measurements and computations have been included for this Plan Quantity item. **Signature:** _____ **Print Name:** _____

NOTES FOR EXPLANATION OF OVER/UNDER RUN

Given:

Plan Quantity	=	1329	SY	Make sure u enter these righ
Final Quantity	=	1329	SY	
FQ-PQ	=	0	SY	If PQ item, is this a ch or err
Final tons	=	415.9	TN	
Unit price	=	21.7	$	
Typ Sec SR lbs/sy	=	6	in	
Design Mix gmm	=	2.328	gmm	Be sure to plug in the correc
job lbs	=	100.8		
Lift thickness	=	3	in	

Results:

Specified SR	=	604.8	lbs
Avg Daily SR	=	302.4	lbs/sy w/in +/- 5%
Proj Avg SR	=	625.88	lbs/sy
Max SR allowed	=	635.04	lbs/sy
P. avg sr/sp sr	=	1.034854497	a ratio
Add thick adj item	=	$0.7563	adjusted unit price
FQ x adj unit price	=	$1,005.12	Dollar am't of adjustment

Condition: If cell d19 > than 1.05, pay 1.05 max

		the max ratio
	$1.0850	adjusted unit price
	$1,441.97	Dollar am't of adjustment

STATE OF FLORIDA, DEPARTMENT OF TRANSPORTATION

AREA COMPUTATIONS

FORM 700-050-01
CONSTRUCTION
06/02

PAY ITEM NO. 0285709

PAY ITEM DESCRIPTION BASE OPTIONAL (BASE GROUP 09)

STATION TO STATION			TRAV. OR PAGE NO.	SIDE	DESIGN ORIGINAL					CONSTRUCTION FINAL			
					WIDTH	LENGTH	CURVE CORR(+/-)	AREA (SY)	REMARKS	WIDTH	LENGTH	AREA (SY)	REMARKS
16+35.98	-	31+16.23						1,184.8					NO ERROR OR CHANGE
12+62.35	-	12+74.43						27.9				1329	TOTAL SY @ 100%
15+20.01	-	15+60.09						90.2					SEE FOLDER ADM-1 FOR
17+07.63	-	17+56.61						26.3					ASPH SUMMARY
												1329	LOT 1 @ 99% CPF
													SEE PG 26.1 FOR
													SPREAD RATE ADJ
													1329 SY @ -$0.0588

1,329	< PAGE TOTAL >	
1,329	< PROJECT GRAND TOTAL >	1329

If the above item is under the **Plan Quantity Concept**, then the block below **must be** appropriately filled out.

Plan Quantity Concept Signature Block
Design Engineers Responsible for Calculations: All support measurements and computations have been included for this Plan Quantity item. **Signature:** _____ **Print Name:** _____

NOTES FOR EXPLANATION OF OVER/UNDER RUN

Given:

Plan Quantity	=	1329	SY	Make sure u enter these righ
Final Quantity	=	1329	SY	
FQ-PQ	=	0	SY	If PQ item, is this a ch or err
Final tons	=	400.8	TN	
Unit price	=	21.7	$	
Typ Sec SR lbs/sy	=	6	in	
Design Mix gmm	=	2.328	gmm	Be sure to plug in the correc
job lbs	=	100.8		
Lift thickness	=	3	in	

Results:

Specified SR	=	604.8	lbs
Avg Daily SR	=	302.4	lbs/sy w/in +/- 5%
Proj Avg SR	=	603.16	lbs/sy
Max SR allowed	=	635.04	lbs/sy
P. avg sr/sp sr	=	0.99728836	a ratio
Add thick adj item	=	-$0.0588	adjusted unit price
FQ x adj unit price	=	-$78.15	Dollar am't of adjustment

Condition: If cell d19 > than 1.05, pay 1.05 max

		the max ratio
	$1.0850	adjusted unit price
	$1,441.97	Dollar am't of adjustment

STATE OF FLORIDA, DEPARTMENT OF TRANSPORTATION

AREA COMPUTATIONS

FORM 700-050-01
CONSTRUCTION
06/02

PAY ITEM NO. 0285709

PAY ITEM DESCRIPTION BASE OPTIONAL (BASE GROUP 09)

STATION TO STATION			TRAV. OR PAGE NO.	SIDE	DESIGN ORIGINAL WIDTH	DESIGN ORIGINAL LENGTH	DESIGN ORIGINAL CURVE CORR(+/-)	DESIGN ORIGINAL AREA (SY)	DESIGN ORIGINAL REMARKS	CONSTRUCTION FINAL WIDTH	CONSTRUCTION FINAL LENGTH	CONSTRUCTION FINAL AREA (SY)	CONSTRUCTION FINAL REMARKS
16+35.98	-	31+16.23						1,184.8					NO ERROR OR CHANGE
12+62.35	-	12+74.43						27.9					
15+20.01	-	15+60.09						90.2				1329	TOTAL SY
17+07.63	-	17+56.61						26.3					SEE FOLDER ADM-1 FOR ASPH SUMMARY
												23	LOT 1 @ 100% CPF
												1306	LOT 4 @ 99%
												1329	
													SEE PGS 27.1 & 27.2 FOR SPREAD RATE ADJ.
													1306 SY @ $0.7363
													23 SY @ $0.5345
								1,329	< PAGE TOTAL >				
								1,329	< PROJECT GRAND TOTAL >			1329	

If the above item is under the **Plan Quantity Concept**, then the block below **must** be appropriately filled out.

Plan Quantity Concept Signature Block
Design Engineers Responsible for Calculations: All support measurements and computations have been included for this Plan Quantity item. **Signature:** _____ **Print Name:** _____

NOTES FOR EXPLANATION OF OVER/UNDER RUN

Given:

Plan Quantity	=	1306 SY	Make sure u enter these righ
Final Quantity	=	1306 SY	
FQ-PQ	=	0 SY	If PQ item, is this a ch or err
Final tons	=	408.7 TN	
Unit price	=	21.7 $	
Typ Sec SR lbs/sy	=	6 in	
Design Mix gmm	=	2.328 gmm	Be sure to plug in the correc
job lbs	=	100.8	
Lift thickness	=	3 in	

Results:

Specified SR	=	604.8 lbs	
Avg Daily SR	=	302.4 lbs/sy w/in +/- 5%	
Proj Avg SR	=	625.88 lbs/sy	
Max SR allowed	=	635.04 lbs/sy	
P. avg sr/sp sr	=	1.034854497 a ratio	
Add thick adj item	=	$0.7563 adjusted unit price	
FQ x adj unit price	=	$987.73 Dollar am't of adjustment	

Condition: If cell d19 > than 1.05, pay 1.05 max

the max ratio

$1.0850 adjusted unit price

$1,417.01 Dollar am't of adjustment

Given:

Plan Quantity	=	23	SY	Make sure u enter these righ
Final Quantity	=	23	SY	
FQ-PQ	=	0	SY	If PQ item, is this a ch or err
Final tons	=	7.2	TN	
Unit price	=	21.7	$	
Typ Sec SR lbs/sy	=	6	in	
Design Mix gmm	=	2.352	gmm	Be sure to plug in the correc
job lbs	=	101.84		
Lift thickness	=	3	in	

Results:

Specified SR	=	611.04	lbs
Avg Daily SR	=	305.52	lbs/sy w/in +/- 5%
Proj Avg SR	=	626.09	lbs/sy
Max SR allowed	=	641.59	lbs/sy
P. avg sr/sp sr	=	1.024630139	a ratio
Add thick adj item	=	$0.5345	adjusted unit price
FQ x adj unit price	=	$12.29	Dollar am't of adjustment

Condition: If cell d19 > than 1.05, pay 1.05 max

		the max ratio
	$1.0850	adjusted unit price
	$24.96	Dollar am't of adjustment

STATE OF FLORIDA, DEPARTMENT OF TRANSPORTATION

WEIGHT MEASURE OR LIQUID VOLUME COMPUTATIONS

FORM 700-050-06
CONSTRUCTION
06/02

PAY ITEM NO. 0334 1 13

PAY ITEM DESCRIPTION: SUPERPAVE ASPHALTIC CONC (TRAFFIC C)

TYPE CONSTRUCTION OR STATION TO STATION	DESIGN ORIGINAL								CONSTRUCTION FINAL				
	TYPE OF MATERIAL	QUANTITY BY SPREAD RATE % SPREAD	LENGTH	WIDTH	AREA MEASURE	WEIGHT MEASURE (TN)	VOLUME MEASURE	REMARKS	WEIGHT MEASURE (TN)	VOLUME MEASURE	OVER/ ~~UNDER~~ RUN	REFERENCE	REMARKS
XXX+XX - XXX+XX						4,100.00						4214.2	TOTAL TONS
													SEE FOLDER ADM-1
													FOR ASPH SUMMARY
												449.6	LOT 1 @ 100% CPF
												2759.7	LOT 2-3 @ 97%
												1004.9	LOT 4 @ 99%
											+114.2	4214.2	

4,100.0	< PAGE TOTAL >	
4,100.0	< PROJECT GRAND TOTAL >	4214.2

If the above item is under the **Plan Quantity Concept**, then the block below must be appropriately filled out.

Plan Quantity Concept Signature Block
Design Engineers Responsible for Calculations: All support measurements and computations have been included for this Plan Quantity item. **Signature:** _____ **Print Name:** _____

NOTES FOR EXPLANATION OF (OVER)/UNDER RUN: DUE TO DIFFERENCE BETWEEN DESIGN AND ACTUAL SPREAD RATE

STATE OF FLORIDA, DEPARTMENT OF TRANSPORTATION

WEIGHT MEASURE OR LIQUID VOLUME COMPUTATIONS

FORM 700-050-06
CONSTRUCTION
06/02

PAY ITEM NO. 0337 7 6

PAY ITEM DESCRIPTION: ASPH CONC FRICTION COURSE(INC BIT/RUBBER)FC 12.5(FC-6)

TYPE CONSTRUCTION OR STATION TO STATION	DESIGN ORIGINAL								CONSTRUCTION FINAL				
	TYPE OF MATERIAL	QUANTITY BY SPREAD RATE: % SPREAD	LENGTH	WIDTH	AREA MEASURE	WEIGHT MEASURE (TN)	VOLUME MEASURE	REMARKS	WEIGHT MEASURE (TN)	VOLUME MEASURE	OVER/ ~~UNDER~~ RUN	REFERENCE	REMARKS
XXX+XX - XXX+XX						3,300.00			3343.7			FOLDER	TOTAL TONS
												ADM-1	ASPH SUMMARY
									2000.0				LOT 5 @ 97% CPF
									1343.7				LOT 6 @ 104% CPF
									3343.7				
									-10.5				@ 100% OVER
													105% SPREAD RATE
									3333.2		+33.2		MAX PAY

3,300.0	< PAGE TOTAL >	
3,300.0	< PROJECT GRAND TOTAL >	3333.2

If the above item is under the **Plan Quantity Concept**, then the block below must be appropriately filled out.

Plan Quantity Concept Signature Block
Design Engineers Responsible for Calculations: All support measurements and computations have been included for this Plan Quantity item. **Signature:** _____ **Print Name:** _____

NOTES FOR EXPLANATION OF (OVER)/UNDER RUN
DUE TO DIFFERENCE BETWEEN DESIGN & ACTUAL SPREAD RATES

SY's FROM ROAD REPORTS
157.5 lbs/sy X 42325.76 sy / 2000 = 3333.2 MAX PAY
-10.5 TNS.

TARGET S.R. 150 lbs/sy
MAX S.R. 157.5 lbs/sy
ACTUAL S.R. 158.0 lbs/sy > 105%

STATE OF FLORIDA, DEPARTMENT OF TRANSPORTATION

WEIGHT MEASURE OR LIQUID VOLUME COMPUTATIONS

FORM 700-050-06
CONSTRUCTION
06/02

PAY ITEM NO. 0339 1

PAY ITEM DESCRIPTION ASPHALT PAVEMENT MISCELLANEOUS

TYPE CONSTRUCTION OR STATION TO STATION	DESIGN ORIGINAL: TYPE OF MATERIAL	QUANTITY BY SPREAD RATE: % SPREAD	LENGTH	WIDTH	AREA MEASURE	WEIGHT MEASURE (TN)	VOLUME MEASURE	REMARKS	CONSTRUCTION FINAL: WEIGHT MEASURE (TN)	VOLUME MEASURE	OVER/ ~~UNDER~~ RUN	REFERENCE	REMARKS
XXX+XX - XXX+XX		200.00			200.00	20.00							
									26.3			FOLDER	TOTAL TONS
												ADM-1	SEE ASH SUMMARY
									-5.4		+0.9		OVER 105%
													ALLOWABLE SPREAD

20.0	< PAGE TOTAL >		
20.0	< PROJECT GRAND TOTAL >	20.9	

If the above item is under the **Plan Quantity Concept**, then the block below **must** be appropriately filled out.

Plan Quantity Concept Signature Block
Design Engineers Responsible for Calculations: All support measurements and computations have been included for this Plan Quantity item.

Signature: ____________ **Print Name:** ____________

NOTES FOR EXPLANATION OF OVER/UNDER RUN

SY's FROM ROAD REPORTS
MAX SR 210 lbs/SY

26.3 x 2000/198.64 SY = 264.8 lbs/SY > 210 lbs/SY
198.64 SY x 210 lbs/SY / 2000 = 20.9 TNS MAX FOR PAY
-5.4 TNS

DAILY ASPHALT SUMMARY SHEET

FIN #: 11111111 JOB #: N/A S.R.#: SR-05 CONTR.: SHEET:

M,B,S,or F		S		S		S		M		B		B		F		LOT	SUB	Tons Into Lot	CPF
TYPE		12.5		12.5		9.5		12.5		12.5		12.5		FC-12.5					
DESIGN #		SP05-3971B		SP05-3972A		SP04-3148A		SP04-3148B		SP05-3971B		SP05-3972A		SP05-4292A					
% AC																			
ITEM	PLANT	334-1-13		334-1-13		334-1-13		339-1		285709		285709		337-7-20					
DATE	REPORT	TONS	S.Y.	TONS	S.Y.	TONS	S.Y.	TONS	S.Y.	TONS	S.Y.	TONS	S.Y.	TONS	S.Y.				
04/24/06		201.95														1		201.95	
04/25/06		124.10														1		326.05	
04/26/06		123.55								7.20	23.00					1		456.80	0.95
04/24/06				686.07												2		686.07	
04/25/06				628.10												2		1,314.17	
04/26/06				137.84												2		1,452.01	
04/28/06				344.82												2		1,796.83	
05/01/06				203.17												2		2,000.00	0.97
04/28/06						418.83										3		418.83	
05/01/06						214.40										3		633.23	
05/02/06						126.51										3		759.74	0.97
05/01/06				17.15												4		17.15	
05/01/06				324.80												4		341.95	
05/02/06				530.98												4		872.93	
05/04/06				131.93												4		1,047.02	
05/05/06				0.00								42.16	134.71			4		1,413.56	1.00
05/10/06												366.54	1,171.29			4		495.94	
05/11/06														495.94	5,960.89	5		1,535.40	
05/12/06														1,039.46	13,256.88	5		2,000.00	0.97
05/12/06														464.60	6,844.45	5		426.19	
05/15/06														426.19	6,533.33	6		936.65	
05/17/06														510.46	6,492.04	6		1,343.74	1.04
06/06/06								26.26	198.64					407.09	3,238.17	6		26.26	
TOTALS:		449.60	0.00	3,004.86	0.00	759.74	0.00	26.26	198.64	7.20	23.00	408.70	1,306.00	3,343.74	42,325.76				

Tons Misc =	26.26	Spread Rate
S.Y. Misc =	198.64	264.40

Tons Base =	415.90	Spread Rate
S.Y. Base =	1,329.00	625.88

Tons Struct.=	4,214.20
S.Y. Struct. =	N/A

Friction	Target SR	Max SR
	150	157.5
Tons Friction =	3,343.74	Spread Rate
S.Y. Friction =	42,325.76	158.00

B	285709	LOT	CPF	TONS	SY	Unit Price	Adj. Unit	$
		1	1.00	7.2	23.00	$21.70	0.0000	
		4	0.99	408.7	1306.00		-$0.2170	-$283.40

S	334-1-13	LOT	CPF	TONS	SY	Unit Price	Adj. Unit	$
		1	1.00	449.6	0.00	$90.00	0.0000	
		2	0.97	2000.0	0.00		-$2.7000	-$5,400.00
		3	0.97	759.7	0.00		-$2.7000	-$2,051.19
		4	0.99	1004.9	0.00		-$0.9000	-$904.41

F	337-7-20	LOT	CPF	TONS	SY	Unit Price	Adj. Unit	$
		5	0.97	2000.0	26062.22	$120.00	-$3.6000	-$7,200.00
		6	1.04	1343.7	16263.54		$4.8000	$6,449.76

CORRECTED COPY ***CORRECTED COPY***

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION

STATEMENT OF SOURCE OF MATERIALS AND JOB MIX FORMULA FOR BITUMINOUS CONCRETE

SUBMIT TO THE STATE MATERIALS ENGINEER, CENTRAL BITUMINOUS LABORATORY, 5007 NORTHEAST 39TH AVENUE, GAINESVILLE, FLA. 32609

Contractor: Elmo Greer & Sons | Address: 9798 SR 60, Vero Beach, FL 32966

Phone No.: (772) 567-6545 | Fax No.: | E-mail: dgifford@elmogreersons.com

Submitted By: Asphalt Technologies, Inc. | Type Mix: Fine FC-12.5 | Intended Use of Mix: Friction Course

Design Traffic Level: C | Gyrations @ Ndes: 75

TYPE MATERIAL	F.D.O.T. CODE	PRODUCER	PIT NO.	DATE SAMPLED
1. S-1-A Stone	42	Rinker Materials Corp.	87-090	06 / 21 / 2005
2. S-1-B Stone	53	Rinker Materials Corp.	87-090	06 / 21 / 2005
3. Screenings	20	Rinker Materials Corp.	87-090	06 / 21 / 2005
4. Screenings	21	Rinker Materials Corp.	87-090	06 / 21 / 2005
5. PG 76-22	916-PG			
6.				

PERCENTAGE BY WEIGHT TOTAL AGGREGATE PASSING SIEVES

	Blend Number	15% 1	32% 2	28% 3	25% 4	5	6	JOB MIX FORMULA	CONTROL POINTS	PRIMARY CONTROL SIEVE
SIEVE SIZE	3/4" 19.0mm	100	100	100	100			100	100	
	1/2" 12.5mm	61	100	100	100			94	90 - 100	
	3/8" 9.5mm	38	91	100	100			88	- 90	
	No. 4 4.75mm	5	10	100	100			57		
	No. 8 2.36mm	3	3	94	83			48	28 - 58	39
	No. 16 1.18mm	2	2	77	63			38		
	No. 30 600µm	1	1	60	47			29		
	No. 50 300µm	1	1	42	30			20		
	No. 100 150µm	1	1	15	14			8		
	No. 200 75µm	1.0	1.0	4.0	4.0			3.5	2 - 10	
	G_{SB}	2.335	2.352	2.500	2.471			2.419		

The mix properties of the Job Mix Formula have been conditionally verified, pending successful final verification during production at the assigned plant, the mix design is approved subject to F.D.O.T. specifications.

JMF reflects aggregate changes expected during production

SPM 05-4292A (TL-C)

Transferred from SP 05-4286A (TL-C)

This corrected report cancels and supersedes orignal report due to incorrect spread rate.

Director, Office of Materials: Thomas O. Malerk, P.E.
Original document retained at the State Materials Office

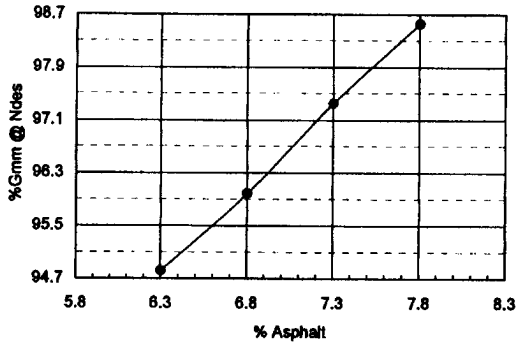
Effective Date: 03 / 21 / 2006

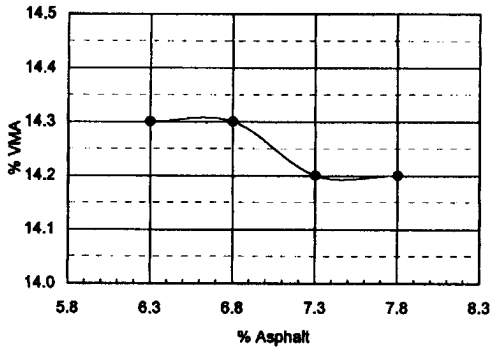
Expiration Date: 07 / 15 / 2008

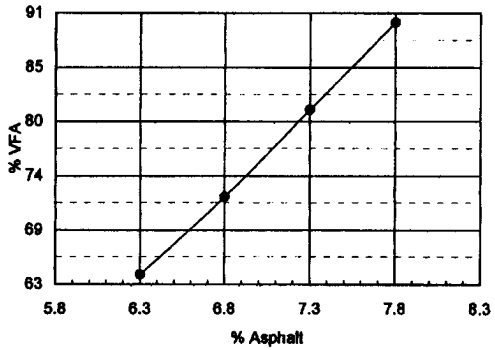
HOT MIX DESIGN DATA SHEET

SPM 05-4292A (TL-C)

P_b	G_{mb} @ N_{des}	G_{mm}	V_a	VMA	VFA	P_{be}	$P_{0.075}$ / P_{be}	%G_{mm} @ N_{ini}	%G_{mm} @ N_{max}
6.3	2.212	2.333	5.2	14.3	64	4.3	0.8	87.8	95.8
6.8	2.224	2.317	4.0	14.3	72	4.8	0.7	89.0	97.0
7.3	2.240	2.301	2.7	14.2	81	5.3	0.7	90.3	98.3
7.8	2.252	2.285	1.4	14.2	90	5.8	0.6	91.6	99.6







Total Binder Content 6.8 %

FAA 45.0 %

Mixing Temperature 325 °F 163 °C

Spread Rate @ 1" 100 lbs/yd^2

%G_{mm} @ N_{des} 96.0

Compaction Temperature 325 °F 163 °C

Arr-Maz Ad-Here LOF 65-00 (S916-1012)

VMA 14.3 %

NCAT Oven Calibration Factor -0.12

(+To Be Added)/(-To Be Subtracted)

Additives Antistrip 0.5 % _____ %

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION
STATEMENT OF SOURCE OF MATERIALS AND JOB MIX FORMULA FOR BITUMINOUS CONCRETE

SUBMIT TO THE STATE MATERIALS ENGINEER, CENTRAL BITUMINOUS LABORATORY, 5007 NORTHEAST 39TH AVENUE, GAINESVILLE, FLA. 32609

Contractor: APAC-Southeast, Inc., Southern Florida Division Address: P.O.Box 2579, Sarasota, FL 34230

Phone No.: (941) 483-3329 Fax No.: (941) 486-0170 E-mail: dlsheppard@ashland.com

Submitted By: APAC-Southeast, Inc. Type Mix: Fine SP-12.5 Recycle Intended Use of Mix: Structural

Design Traffic Level: C Gyrations @ N des: 75

TYPE MATERIAL	F.D.O.T. CODE	PRODUCER	PIT NO.	DATE SAMPLED
1. Milled Material		411862-1-52-01		11 / 15 / 2002
2. S-1-A Stone	41	Rinker Materials Corp.	12-008	11 / 15 / 2002
3. S-1-B Stone	53	Rinker Materials Corp.	12-008	11 / 15 / 2002
4. # 132 Screenings	21	Rinker Materials Corp.	12-008	11 / 15 / 2002
5.				
6.				

PERCENTAGE BY WEIGHT TOTAL AGGREGATE PASSING SIEVES

	Blend	25%	15%	28%	32%			JOB MIX	CONTROL	RESTRICTED
	Number	1	2	3	4	5	6	FORMULA	POINTS	ZONE
SIEVE SIZE	3/4" 19.0mm	100	100	100	100			100	100	
	1/2" 12.5mm	99	65	100	100			95	90 - 100	
	3/8" 9.5mm	97	31	100	100			89	- 90	
	No. 4 4.75mm	74	8	85	99			75		
	No. 8 2.36mm	55	3	10	93			47	28 - 58	39.1 - 39.1
	No. 16 1.18mm	46	2	4	69			35		25.6 - 31.6
	No. 30 600µm	40	2	3	46			26		19.1 - 23.1
	No. 50 300µm	29	2	1	27			17		
	No. 100 150µm	16	1	1	11			10		
	No. 200 75µm	9.6	1.0	1.0	3.0			5.2	2 - 10	
	G_{sb}	2.592	2.337	2.400	2.466			2.457		

The mix properties of the Job Mix Formula have been conditionally verified, pending successful final verification during production at the assigned plant, the mix design is approved subject to F.D.O.T. specifications.

JMF reflects aggregate changes expected during production.

SP 05-3971B (TL-C)

SP 05-3971A revised to reflect change in recycled material.

Director, State Materials Office: Thomas O. Malerk
Original document retained at the State Materials Office

Effective Date: 03 / 01 / 2005

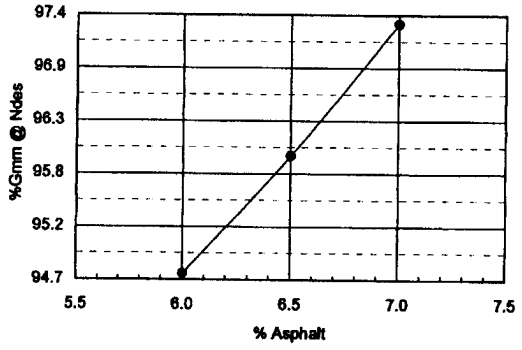
Expiration Date: 02 / 21 / 2008

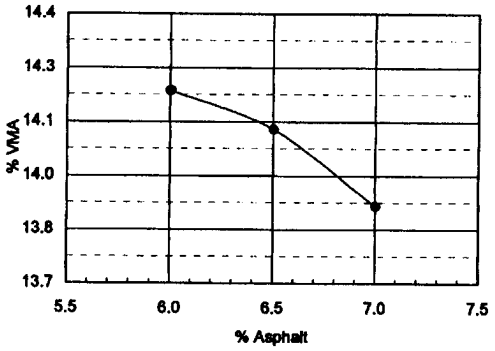
http://materials.dot.state.fl.us/Smo/Bituminous/CentralBitLab/CentralBituminousLab.htm

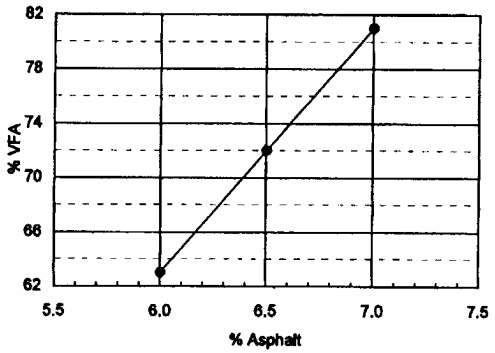
HOT MIX DESIGN DATA SHEET

SP 05-3971B (TL-C)

P_b	G_{mb} @ N_{des}	G_{mm}	V_a	VMA	VFA	P_{be}	$P_{0.075}$ / P_{be}	%G_{mm} @ N_{ini}	%G_{mm} @ N_{max}
6.0	2.242	2.366	5.2	14.2	63	4.1	1.3	86.6	97.2
6.5	2.257	2.352	4.0	14.1	72	4.6	1.1	87.3	97.9
7.0	2.275	2.338	2.7	13.9	81	5.1	1.0	88.4	98.2







Total Binder Content 6.5 %

FAA 45 %

Mixing Temperature 300 °F 149 °C

Lab. Density 140.8 Lbs/Ft^3 2257 Kg/m^3

%G_{mm} @ N_{des} 96.0

Compaction Temperature 290 °F 143 °C

Arr-Maz Ad-Here SL (S916-1008)

VMA 14.1 %

NCAT Oven Calibration Factor -0.38

(+To Be Added)/(-To Be Subtracted)

Additives Antistrip 0.5 % _____ %

Optimum Asphalt = 6.50%

Asphalt using 25% Milled Material @ 7.1% = 1.80%

PG 64-22 to be added = 4.70%

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION
STATEMENT OF SOURCE OF MATERIALS AND JOB MIX FORMULA FOR BITUMINOUS CONCRETE

SUBMIT TO THE STATE MATERIALS ENGINEER, CENTRAL BITUMINOUS LABORATORY, 5007 NORTHEAST 39TH AVENUE, GAINESVILLE, FLA. 32609

Contractor: APAC-Southeast, Inc., Central Florida Division Address: 1445 42nd Street, Winter Haven, FL 33881

Phone No.: (863) 967-0646 Fax No.: (863) 967-6829 E-mail: lgimes@ashland.com

Submitted By: APAC-Southeast, Inc. Type Mix: Fine SP-12.5 Recycle Intended Use of Mix: Structural

Design Traffic Level: C Gyrations @ N des: 75

TYPE MATERIAL	F.D.O.T. CODE	PRODUCER	PIT NO.	DATE SAMPLED
1. Crushed R.A.P.	7-04	APAC-Southeast, Inc.	A0684	01 / 13 / 2004
2. S-1-A Stone	42	Rinker Materials Corp.	TM-447 87-090	01 / 13 / 2004
3. FC-3 Stone	55	Rinker Materials Corp.	TM-447 87-090	01 / 13 / 2004
4. Med. Asp. Screenings	21	Rinker Materials Corp.	TM-447 87-090	01 / 13 / 2004
5. Asphalt Sand		Rinker Materials Corp.	16-564	01 / 13 / 2004
6.				

PERCENTAGE BY WEIGHT TOTAL AGGREGATE PASSING SIEVES

	Blend	25%	10%	30%	32%	3%		JOB MIX	CONTROL	RESTRICTED
	Number	1	2	3	4	5	6	FORMULA	POINTS	ZONE
SIEVE SIZE	3/4" 19.0mm	100	100	100	100	100		100	100	
	1/2" 12.5mm	99	69	100	100	100		97	90 - 100	
	3/8" 9.5mm	96	37	90	100	100		90	- 90	
	No. 4 4.75mm	81	8	41	100	100		68		
	No. 8 2.36mm	62	5	6	92	100		50	28 - 58	39.1 - 39.1
	No. 16 1.18mm	53	4	4	73	100		41		25.6 - 31.6
	No. 30 600µm	44	3	4	52	98		32		19.1 - 23.1
	No. 50 300µm	31	3	3	37	60		23		
	No. 100 150µm	13	2	3	15	12		10		
	No. 200 75µm	7.0	2.0	2.0	5.0	1.0		4.5	2 - 10	
	G_{sb}	2.582	2.335	2.339	2.471	2.654		2.447		

The mix properties of the Job Mix Formula have been conditionally verified, pending successful final verification during production at the assigned plant, the mix design is approved subject to F.D.O.T. specifications.

JMF reflects aggregate changes expected during production.

SP 05-3972A (TL-C)

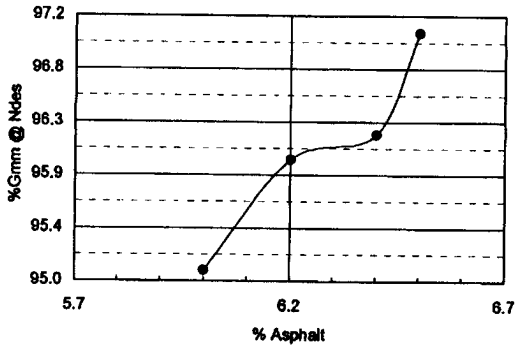
Transferred from SP 03-2349A (TL-C)

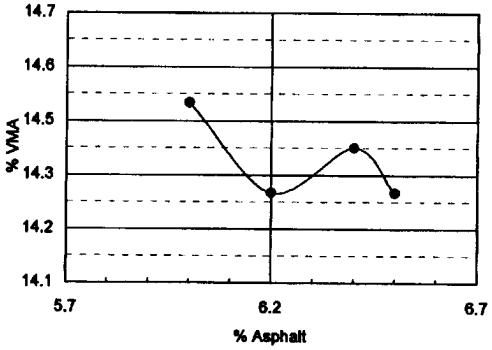
Director, Office of Materials: Thomas O. Malerk
Original document retained at the State Materials Office
Effective Date: 12 / 16 / 2004
Expiration Date: 12 / 16 / 2007

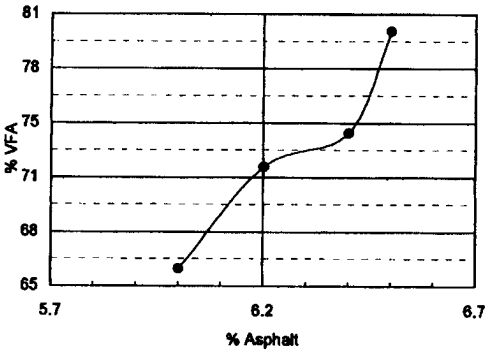
HOT MIX DESIGN DATA SHEET

SP 05-3972A (TL-C)

P_b	G_{mb} @ N_{des}	G_{mm}	V_a	VMA	VFA	P_{be}	$P_{0.075}$ / P_{be}	%G_{mm} @ N_{ini}	%G_{mm} @ N_{max}
6.0	2.226	2.341	4.9	14.5	66	4.4	1.0	88.4	96.0
6.2	2.235	2.328	4.0	14.3	72	4.8	0.9	89.0	96.7
6.4	2.237	2.325	3.8	14.4	74	4.9	0.9	89.2	96.9
6.5	2.243	2.311	2.9	14.3	80	5.2	0.9	89.3	97.0







Total Binder Content 6.2 %

FAA 45 %

Mixing Temperature 300 °F 149 °C

Lab. Density 139.5 Lbs/Ft^3 2235 Kg/m^3

%G_{mm} @ N_{des} 96.0

Compaction Temperature 285 °F 141 °C

Arr-Maz Ad-Here LOF 65-00 (S916-1012)

VMA 14.3 %

NCAT Oven Calibration Factor +0.02

(+To Be Added)/(-To Be Subtracted)

Additives Antistrip 0.5 % _____ %

Optimum Asphalt = 6.20%

Asphalt using 25% Milled Material @ 5.6% = 1.40%

PG 64-22 to be added = 4.80%

Lorie Wilson - DO Construction/D5/FDOT
09/26/2006 03:16 PM

To D5 RESIDENT ENGINEERS
cc
bcc
Subject Design Build/Lump Sum 9-2 Specification

If you have a design build lump sum project you should have specification 9-2.3.2 which does not allow for a tolerance on the combined spread rate. In order to remedy this problem you need to process a zero dollar work order to add specification 9-2.2.2 which provides a 5% tolerance.

LS 9-2.2.2.doc Specification to Add by Work Order

If you have any questions call John Burnette.
Lorie A. Wilson
District Construction Support Manager
719 South Woodland Blvd.
DeLand, Fl. 32720-6834
MS 3-506
Suncom 373-5346
Phone (386) 943-5346
Fax (386) 740-4292
E-Mail: Lorie.Wilson@dot.state.fl.us

----- Forwarded by Lorie Wilson - DO Construction/D5/FDOT on 09/26/2006 03:12 PM -----

John Burnette/D5/FDOT
09/21/2006 08:46 AM

To Lorie Wilson - DO Construction/D5/FDOT@FDOT
cc david.chason@dot.state.fl.us@FDOT
Subject Fw: Notes to file design build Project 416392 (E5K21).

Lorie,

As we discussed, the Spec that is in the Design Built LS projects 9-2.3.2 (See Spec Attached from Betty Smith) needs to be changed out by the LS Spec. 9-2.2.2. The language in the Design Build LS Spec allows +or - 10% for the layer but the total thickness allows no tolerance, also it uses 43 or 44 lbs/sy instead of 43.3 for calculating the target. I have talked to David Chason on this matter and he said he had talked to others who are responsible for these specs and had told them that all they need to do is make both the Design Build LS Specs and the LS the same language. He said he would talk to them again.

I have given the directions as listed below on three of our Design Build LS projects, but do not feel comfortable not following specs. A zero tolerance is not reasonable or attainable. I informed David of my actions and he had no problem with the call that I made but suggested we might want to change the Spec Language.

LS 9-2.2.2.doc

John M. Burnette

the current API (CAPI) varies by more than 5% of the API prevailing in the month when bids were received (BAPI), and then only on the portion that exceeds 5%.

The Department will determine the API for each month by averaging quotations in effect on the first day of the month at all terminals that could reasonably be expected to furnish bituminous material to projects in the State of Florida.

The API will be available on the Construction Office website before the 15th of each month at the following URL:
www.dot.state.fl.us/construction/fuel&Bit/Fuel&Bit.htm.

Payment on progress estimates will be adjusted to reflect adjustments in the prices for bituminous materials in accordance with the following:

$ Adjustment = (ID)(Gallons)

Where ID = Index Difference = [CAPI - 0.95(BAPI)] when the API has decreased between the month of bid and month of this progress estimate.

Where ID = Index Difference = [CAPI - 1.05(BAPI)] when the API has increased between the month of bid and month of this progress estimate.

Payment will be made on the current progress estimate to reflect the index difference at the time work was performed.

For asphalt concrete items payable by the ton, the number of gallons will be determined assuming a mix design with 6.25% liquid asphalt weighing 8.58 lb/gal.

Asphalt concrete items payable by the square yard will be converted to equivalent tons assuming a weight of 100 lb/yd^2 per inch.

9-2.2 Non-Duplication of Payment :Not applicable.

9-2.3 General Basis of Adjusted Pay:

9-2.3.1 Deficiencies: When a deficiency occurs that results in the acceptance of a material at a reduced payment level as defined in these Specifications, the Engineer will apply a reduction in payment for the material in question based on the unit prices as determined using the six-month State wide pay item averages. The dates will be the six months prior to the letting date for this Contract.

9-2.2.2 Asphalt Design Thickness/Spread Rate: The average spread rate per sublot will be used to determine if the amount of asphalt placed on the project meets the minimum requirements specified in the Contract Documents. Before placing asphalt mix, propose a target spread rate for each layer, which when combined with other layers, will meet the design thickness or spread rate specified in the Contract Documents. The weight of the mixture will be determined as provided in 320-2 (including the provisions for automatic recordation system).

On projects specifying a thickness in the Contract Documents for asphalt, the conversion of design thickness to target spread rate will be established by multiplying the maximum specific gravity of the asphalt mix (as indicated on the verified mix design) by 43.3 lbs/sy for every inch of asphalt.

On projects specifying a total spread rate of mix in the Contract Documents for asphalt, calculate the average spread rate per sublot (as defined in Section 334) by the following formula:

Average spread rate per sublot = Total weight of asphalt mix (lbs) for the sublot/area covered by that sublot (sy)

During construction, monitor the mix spread rate of each sublot at frequent intervals in accordance with 330-2.2 in order to meet the target spread rate for each sublot. Document the actual spread rate of each sublot on the Roadway QC Form.

The Engineer will determine if the material of the roadway pavement is acceptable to remain in place at full pay, remain in place at reduced pay or corrected at no cost to the Department. Final disposition of the finished roadway pavement will be based upon the comparison between the design spread rate specified in the Contract Documents and the combined value of the average spread rate of each sublot at the same area (including FC-6, but excluding FC-5). The acceptable tolerance of the combined spread rate evaluation of the roadway pavement is ± 5%.

Reductions in pay will be determined per sublot by applying a proportional reduction in payment for the material in question, based on a ratio of the average spread rate for the sublot to the design spread rate, which will then be applied in accordance with 9-2.3.1. Any quantity over the designed spread rate specified in the Contract Documents shall not be paid.

9-2.3.3 Quality: Where an adjustment of payment for quality is called for in the Contract Documents, the Engineer will make such adjustments for the corresponding quantity of material based on the unit prices as determined using the six month State wide pay item averages. The dates will be the six months prior to the letting date for this Contract.

9-2.3.4 Adjustment to the Lump Sum Payment for Deleted Items of Work: When items such as pipe culverts, inlets, manholes, mitered end sections, etc. are shown in the Contract Documents to be constructed or installed and due to actual field conditions, it is determined by the Engineer that the item is not needed, then a negative adjustment will be made based on the invoice price for the actual cost of the item and the Contractor will retain ownership.

9-3 Compensation for Altered Quantities.

Not applicable.

9-4 Deleted Work.

The Department will have the right to cancel the portions of the Contract relating to the construction of any acceptable item therein, by the payment to the Contractor of a fair and equitable amount covering all items of cost incurred prior to the date that the Engineer cancels or suspends the work.

In addition to having the right of canceling the portions of the Contract relating to the construction of any acceptable item therein, the Department shall have the right to cancel any portion of the engineering services. Said cancellation shall be in the same manner as contained herein.

9-5 Partial Payments.

9-5.1 General: The Engineer will make partial payments on monthly estimates based on the amount of work that the Contractor completes during the month (including delivery of certain materials, as specified herein below) based on a Contractor approved payout schedule (schedule of values). The Engineer will make approximate monthly payments, and the Department will correct all partial estimates and payments in the subsequent estimates and in the final estimate and payment.

570 PERFORMANCE TURF.
(REV 9-11-06) (FA 9-13-06) (1-07)

SECTION 570 (Pages 664-667) is deleted and the following substituted:

SECTION 570
PERFORMANCE TURF

570-1 Description.

Establish a growing, healthy turf over all areas designated on the plans. Use sod in areas designated on the plans to be sodded. Use seed, hydroseed, bonded fiber matrix, or sod in all other areas. Maintain turf areas until final acceptance of all contract work in accordance with Section 5-11.

570-2 Materials.

Meet the following requirements:

Turf Materials	Section 981
Fertilizer	Section 982
Water	Section 983

570-3 Construction Methods.

570-3.1 General: Incorporate turf installation into the project at the earliest practical time.

Shape the areas to be planted to the plan typical sections and lines and grade shown in the Contract Documents.

Except in areas where the Contract Documents requires specific types of grass to match adjoining private property, any species of grass designated in Section 981 may be used. Use the methods and materials necessary to establish and maintain the initial grassing until acceptance of the Contract work in accordance with 5-11. All of the permanent grassing material shall be in place prior to final acceptance.

The Department will only pay for replanting as necessary due to factors determined by the Engineer to be beyond control of the Contractor.

Complete all grassing on shoulder areas prior to the placement of the friction course on adjacent pavement.

570-3.2 Seeding: At the Contractor's option, wildflower seed may be included in the turf seeding operation or performed separately from the turf seeding.

Use of compost meeting the requirements of Section 987 as mulch is acceptable unless otherwise specified.

570-3.3 Sod: Place the sod on the prepared surface, with edges in close contact. Do not use sod which has been cut for more than 48 hours.

Place the sod to the edge of all landscape areas as shown in the plans and as shown in the Design Standards.

Peg sod at locations where the sod may slide. Drive pegs through sod blocks into firm earth, flush with the sod soil surface, at intervals approved by the Engineer. The work and materials for pegging of sod as directed by the Engineer will be paid for as Unforeseeable Work.

Place rolled sod parallel with the roadway and cut any exposed netting even with the sod edge.

Monitor placed sod for growth of pest plants and noxious weeds. If pest plants and/or noxious weeds manifest themselves within 30 days of placement of the sod during the months April through October, within 60 days of placement of the sod during the months of November through March treat affected areas by means acceptable to the Department at no expense to the Department. If pest plants and/or noxious weeds manifest themselves after the time frames described above from date of placement of sod, the Engineer, at his sole option, will determine if treatment is required and whether or not the Contractor will be compensated for such treatment. If compensation is provided, payment will be made as Unforeseeable Work as described in 4-4.

Remove and replace any sod as directed by the Engineer.

570-3.4 Hydroseeding: Use equipment specifically designed for mixing the wood fiber, seed, fertilizer, tackifier and dye, and applying the slurry uniformly over the areas to be hydroseeded.

Use wood fiber that is made of 100% hardwood or softwood and does not contain reprocessed wood or paper fibers. Ensure that a minimum of 50% of the fibers are equal to or greater than 0.15 inch in length and a minimum of 50% of the fibers will be retained on a twenty-five mesh screen.

Mix fertilizer as required into the hydroseeding slurry.

Mix seed into the slurry at rates in accordance with Design Standards, Index 104.

Ensure that the dye does not contain growth or germination inhibiting chemicals.

When polyacrylamide is used as part of hydroseeding mix, only anionic polymer formulation with free acrylamide monomer residual content of less than 0.05% is allowed. Cationic polyacrylamide shall not be used in any concentration. Do not spray polyacrylamide containing mixtures onto pavement. These may include tackifiers, flocculants or moisture-holding compounds.

570-3.5 Bonded Fiber Matrix (BFM): Meet the minimum physical and performance criteria of this Specification for use of BFM in hydroseeding operations or temporary non-vegetative erosion and sediment control methods.

Provide evidence of product performance testing, manufacturer's certification of training and material samples to the Engineer at least seven calendar days prior to installation.

Ensure that the BFM is composed of long strand, thermally processed wood fibers held together by crosslinked hydro-colloid tackifier (>10%), which, upon drying becomes water-insoluble and non-dispersible. Ensure that the BFM contains biodegradable dye to aid in uniform application of the material and that the resulting matrix performs in a manner equal or superior to biodegradable erosion control blankets (ECBs). Provide documentation of manufacturer's testing at an independent laboratory to the Engineer, demonstrating superior performance of BFM as measured by reduced water runoff, reduced soil loss and faster seed germination in comparison to erosion control blankets.

Use only BFMs that contain all components pre-packaged by the manufacturer to assure material performance. Deliver materials in UV and weather resistant factory labeled packaging. Store and handle products in strict compliance with the manufacturer's directions.

When polyacrylamide is used as part of hydroseeding mix, only anionic polymer formulation with free acrylamide monomer residual content of less than 0.05% is allowed. Cationic polyacrylamide shall not be used in any concentration. Do not spray polyacrylamide

containing mixtures onto pavement. These may include tackifiers, flocculants or moisture-holding compounds.

Meet the following requirements after application of the formed matrix:

Ensure that the tackifier does not dissolve or disperse upon re-wetting.

Ensure that the matrix has no gaps between the product and the soil and that it provides 100% coverage of all disturbed soil areas after application.

Ensure that the matrix has a minimum water holding capacity of 1.2 gal/lb.

Ensure that the matrix has no germination or growth inhibiting properties and does not form a water-repelling crust.

Ensure that the matrix is comprised of materials which are 100% biodegradable and 100% beneficial to plant growth.

Mix and apply the BFM in strict compliance with the manufacturer's recommendations.

Apply the BFM to geotechnically stable slopes at the manufacturer's recommended rates.

Degradation of BFM will occur naturally as a result of chemical and biological hydrolysis, UV exposure and temperature fluctuations. Re-application, as determined by the Engineer, will be required if BFM-treated soils are disturbed or water quality or turbidity tests show the need for an additional application. The work and materials for re-application, will be paid for as Unforeseeable Work.

570-3.6 Watering: Water all turf areas as necessary to produce a healthy and vigorous stand of turf. Ensure that the water used for turf irrigation meets the requirements of Section 983.

570-3.7 Fertilizing: Fertilize as necessary based on soil testing performed in accordance with Section 162. Refer to Section 982 for fertilizer rates.

For bid purposes, base estimated quantities on an initial application of 265 lbs/acre and one subsequent application of 135 lbs/acre of 16-0-8.

570-4 Turf Establishment.

Perform all work necessary, including watering and fertilizing, to sustain an established turf until final acceptance, at no additional expense to the Department. Provide the filling, leveling, and repairing of any washed or eroded areas, as may be necessary.

Established turf is defined as follows:

Established root system (leaf blades break before seedlings or sod can be pulled from the soil by hand).

No bare spots larger than one square foot.

No continuous streaks running perpendicular to the face of the slope.

No bare areas comprising more than 1% of any given 1,000 square foot area.

No deformation of the turf areas caused by mowing or other Contractor equipment.

Monitor turf areas and remove all competing vegetation, pest plants, and noxious weeds (as listed by the Florida Exotic Pest Plant Council, Category I "List of Invasive Species", Current Edition, www.fleppc.org). Remove such vegetation regularly by manual, mechanical, or chemical control means, as necessary. When selecting herbicides, pay particular attention to ensure use of chemicals that will not harm desired turf or wildflower species. Use herbicides in accordance with 7-1.7.

Take responsibility for litter removal and mowing turf (including undisturbed areas within the project limits) until final acceptance. Begin mowing new turf after establishment of a healthy root system. Mow all turf to the height of not less than 6 inches. Mow the sodded areas when competing vegetation height exceeds 20 inches in height. Do not mow wildflower areas until at least three weeks after the peak of the bloom period and do not mow lower than 6 inches. Do not use selective herbicides in wildflower areas.

If at the time that all other work on the project is completed, but all turf areas have not met the requirements for established turf set forth in 570-4, continuously maintain all turf areas until the requirements for established turf set forth in 570-4 have been met.

During the entire establishment period and until turf is established in accordance with this specification, continue inspection (once every seven days and after each 1/2 inch of rain) and maintenance of erosion and sedimentation control items in accordance with Section 104. Take responsibility for the proper removal and disposal of all erosion and sedimentation control items after turf has been established.

Notify the Engineer, with a minimum of seven calendar days advance notice, to conduct inspections of the turf at approximate 90-day intervals during the establishment period to determine establishment. Results of such inspections will be made available to the Contractor within seven calendar days of the date of inspection. Determination of an established turf will be based on the entire project and not in sections.

Upon the determination by the Engineer that the requirements of 570-4 have been met and an established turf has been achieved and all erosion and sedimentation control items have been removed, the Engineer will release the Contractor from any further responsibility provided for in this Specification.

The Contractor's establishment obligations of this specification will not apply to deficiencies due to the following factors, if found by the Engineer to be beyond the control of the Contractor, his Subcontractors, Vendors or Suppliers:

a. Determination that the deficiency was due to the failure of other features of the Contract.

b. Determination that the deficiency was the responsibility of a third party performing work not included in the Contract or its actions.

The Department will only pay for replanting as necessary due to factors determined by the Department to be beyond the control of the Contractor.

570-5 Responsible Party.

For the purposes of this Specification, the Contractor shall be the responsible party throughout construction and establishment periods.

Upon final acceptance of the Contract in accordance with 5-11, the Contractor's responsibility for maintenance of all the work or facilities within the project limits of the Contract will terminate in accordance with 5-11; with the sole exception that the facilities damaged due to lack of established turf and the obligations set forth in this Specification-for Performance Turf shall continue thereafter to be responsibility of the Contractor as otherwise provided in this Section.

570-6 Disputes Resolution.

The Contractor and the Department acknowledge that use of the Statewide Disputes Review Board is required and the determinations of the Statewide Disputes Review Board for disputes arising out of the Performance Turf Specification will be binding on both the Contractor

and the Department, with no right of appeal by either party, for the purposes of this Specification.

Any and all Statewide Disputes Review Board meetings after final acceptance of the Contract in accordance with 5-11 shall be requested and paid for by the Contractor. The Department will reimburse the Contractor for all fees associated with meetings.

570-7 Failure to Perform.

Should the Contractor fail to timely submit any dispute to the Statewide Disputes Review Board, refuse to submit any dispute to the Statewide Disputes Review Board, fail to provide an established turf in accordance with 570-4 within one-year of final acceptance of the Contract in accordance with 5-11, or fail to compensate the Department for any remedial work performed by the Department in establishing a turf and other remedial work associated with lack of an established turf, including but not limited to, repair of shoulder or other areas due to erosion and removal of sediments deposited in roadside ditches and streams, as determined by the Statewide Disputes Review Board to be the Contractor's responsibility, the Department shall suspend, revoke or deny the Contractor's certificate of qualification under the terms of Section 337.16(d)(2), Florida Statutes, until the Contractor provide an established turf or full and complete payment for the remedial work made to the Department. In no case shall the period of suspension, revocation, or denial of the Contractor's certificate of qualification be less than six (6) months. Should the Contractor choose to challenge the Department's notification of intent for suspension, revocation or denial of qualification and the Department's action is upheld, the Contractor shall have its qualification suspended for a minimum of six (6) months or until the remedial action is satisfactorily performed, whichever is longer.

570-8 Method of Measurement.

The quantities to be paid for will be plan quantity in square yards based on the area shown in the plans, completed and accepted.

570-9 Basis of Payment.

Prices and payments will be full compensation for all work and materials specified in this Section.

Payment will be made under:

Item No. 570- 1- Performance Turf - per square yard.

575 SODDING.
(REV 9-7-05) (FA 9-6-06) (1-07)

SECTION 575 (Pages 667-669) is deleted.

981 TURF MATERIALS.
(REV 6-27-06) (FA 7-7-06) (1-07)

SECTION 981 (Pages 884-886) is deleted and the following substituted:

SECTION 981
TURF MATERIALS

981-1 General.

The types of seed and sod will be specified in the Contract Documents. All seed and sod shall meet the requirements of the Florida Department of Agriculture and Consumer Services and all applicable State laws, and shall be approved by the Engineer before installation.

All seed, sod and mulch shall be free of noxious weeds and exotic pest plants, plant parts or seed listed in the current Category I "List of Invasive Species" from the Florida Exotic Pest Plant Council (FLEPPC, www.fleppc.org). Any plant officially listed as being noxious or undesirable by any Federal Agency, any agency of the State of Florida or any local jurisdiction in which the project is being constructed shall not be used. Furnish to the Engineer, prior to incorporation onto the project, a certification from the Florida Department of Agriculture and Consumer Services, Division of Plant Industry, stating that the seed, sod or mulch materials are free of noxious weeds. Any such noxious or invasive plant or plant part found to be delivered in seed, sod or mulch will be removed by the Contractor at his expense and in accordance with the law.

All materials shall meet plant quarantine and certification entry requirements of Florida Department of Agriculture & Consumer Services, Division of Plant Industry Rules.

981-2 Seed.

The seed shall have been harvested from the previous year's crop. All seed bags shall have a label attached stating the date of harvest, LOT number, percent purity, percent germination, noxious weed certification and date of test.

Each of the species or varieties of seed shall be furnished and delivered in separate labeled bags. During handling and storing, the seed shall be cared for in such a manner that it will be protected from damage by heat, moisture, rodents and other causes.

All permanent and temporary turf seed shall have been tested within a period of six months of the date of planting.

All permanent and temporary turf seed shall have a minimum percent of purity and germination as follows:

1. All Bahia seed shall have a minimum pure live seed content of 95% with a minimum germination of 80%.
2. Bermuda seed shall be of common variety with a minimum pure live seed content of 95% with a minimum germination of 85%.
3. Annual Type Ryegrass seed shall have a minimum pure live seed content of 95% with a minimum germination of 90%.

981-3 Sod.

981-3.1 Types: Unless a particular type of sod is called for in the Contract Documents, sod may be either centipede, bahia, or bermuda at the Contractor's option. It shall be well matted

with roots. Where sodding will adjoin, or be in sufficiently close proximity to, private lawns, other types of sod may be used if desired by the affected property owners and approved by the Engineer.

981-3.2 Dimensions: The sod shall be taken up in commercial-size rectangles, or rolls, preferably 12 by 24 inch or larger, except where 6 inch strip sodding is called for, or as rolled sod at least 12 inches in width and length consistent with the equipment and methods used to handle the rolls and place the sod. Sod shall be a minimum of 1 1/4 inch thick including a 3/4 inch thick layer of roots and topsoil. Reducing the width of rolled sod is not permitted after the sod has been taken up from the initial growing location. Any netting contained within the sod shall be certified by the manufacturer to be bio-degradable within a period of three months from installation.

981-3.3 Condition: The sod shall be sufficiently thick to secure a dense stand of live turf. The sod shall be live, fresh and uninjured, at the time of planting. It shall have a soil mat of sufficient thickness adhering firmly to the roots to withstand all necessary handling. It shall be planted within 48 hours after being cut and kept moist from the time it is cut until it is planted. No sod which has been cut for more than 48 hours may be used unless specifically authorized by the Engineer. A letter of certification from the turf Contractor as to when the sod was cut, and what type, shall be provided to the Engineer upon delivery of the sod to the job site.

The source of the sod may be inspected and approved by the Engineer prior to being cut for use in the work.

981-4 Mulch.

The mulch material shall be compost meeting the requirements of Section 987, hardwood barks, shavings or chips; or inorganic mulch materials as approved by the Engineer; or hydraulically applied wood fiber mulch or bonded fiber matrix (BFM).

981-5 Source Requirements for Sod and Mulch.

The Contractor shall comply with all current restrictions in regard to movement of sod and mulch material, as required by the Division of Plant Industry, Florida Department of Agriculture and Consumer Services (www.doacs.state.fl.us/pi/plantinsp/pi_reg_summary.html), and the Plant protection Quarantine requirements of Animal and Plant Health Inspection Services, U.S. Department of Agriculture (www.aphis.usda.gov/ppq/).

982 FERTILIZER.

(REV 8-30-06) (FA9-6-06) (1-07)

ARTICLE 982-3 (Page 886) is deleted and the following substituted:

982-3 Fertilizer Rates.

Soil laboratory fertilization recommendations are based on the amount (lbs) of nutrients (N, P_2O_5, K_2O) to apply per given area (usually 1,000 sq. ft.). From this recommendation it is necessary to select an appropriate fertilizer grade and then determine how much of this fertilizer to apply to the area.

If a complete fertilizer (containing all three primary nutrients) is not available in the ratio of N-P-K necessary to match the ratio required in the fertilizer recommendation, mixed-grade or single-nutrient fertilizers should be used to satisfy each nutrient requirement.

To calculate fertilizer rates:

1. Measure the area to be fertilized in square feet.
2. Select fertilizer(s) to be used based on the soil testing laboratory recommendations by matching the ratio of nutrients recommended to the fertilizer grades available.
3. Determine the amount of fertilizer to apply to a given area (1,000 sq. ft.) by dividing the recommended amount of nutrient by the percentage of the nutrient (on a decimal basis) in the fertilizer. Apply no more than 0.25 lbs P_2O_5/1000 sf per application prior to planting.
4. Adjust the amount of fertilizer to the project area.

SESSION B

SITEMANAGER

ROBIN WOODS, STEVE LANGE
CYNDI PENDARVIS & DANA BRANLY

- When you are ready to move the DWR data back to SiteManager use the following steps.
-

Pipelining Contract back to server
To move DWR's back to the server, do the following:

- Login to SiteManager, Server mode.

- From the Main Menu, select the Pipeline/Zip icon, then the PM to Server icon.

- Open the contract you need to work with. (On the pipeline summary tab) (File open) pick contract.

On the DWR Tab, select any existing DWR's that you may wish to check back in to the local Sitemanager Server. Checking them in to the Server locks the DWR and prevents any changes being made on the local Standalone server connection operation mode of Sitemanager until they are checked out again. Select the DWR's by highlighting them in the upper window and press **ADD** button next to the lower window. DWR's can be removed by highlighting them in the lower window and clicking on the **REMOVE** button.

- On the DWR tab, select the DWR's that you wish to move back to the server and from the "Services menu" choose the option "Pipeline Data". This will lock the DWR's for editing in the "Stand-Alone" mode and move them to the Server database.
  Then in Reverse from the Services menu choose Pipeline Date / pick basic contract data and Pipeline data (Server to PM) back dowm to the Latptop, this will get any info – **Subs Etc. updated to your machine.**

- You can exit "SiteManager Server" mode.

- One thing to always remember is that the person creating the DWR is the only one that can change it and depending where the DWR is (SM-Standalone) or (SM-Server) is where it can be changed.

- The Project Administrator can now sign on to Sitemanager Server mode and review the DWR's and do the Diaries, once checked, add DWR's for quantities wanted or added other than Inspector's quantities then add the Change Orders needed for Weather or Work Order time in DRAFT, then Generate the Estimate and do the Line item and Contract Adjustments needed.

Any Questions give me a call 386-943-5351 or SC 373-5351

SESSION C

CONTRACT CHANGES

FRANK O'DEA & ABEL SIERRA

Contract Administration Update Training
FDOT-District 5 November, 2006

Work Orders and Supplemental Agreements

Preparing the Engineers Estimate

The Engineer's Estimate generally shouldn't match the contractor quote to the penny.

Use the best data available to prepare the estimate:

Statewide average (knowing that now they may be off a little)

Estimated hours and rates

If Blue Book doesn't work, other Internet sources are available for estimating (remember, it is an ESTIMATE).

When your "Estimate" is finished, do not be afraid to express as a range. The spread of the range would depend on the reliability of your assumptions. If it calculates to $15,652.98, a valid range would be around $14,800 to $16,500. (about +/- 5%)

In the end, you estimate may need to be adjusted. If your Initial Estimate was $14,800 to $16,500, and after final negotiation, you and the contractor agree on $21,000, you can hand write on your estimate what changed, such as "Original estimate based on statewide average prices, but contractor was able to provide invoices which supported his claim that material prices have increased to $46.00 per bushel, and therefore, the Engineer's Estimate needs to be increased to $19,500 to $21,500.

If contractor's written quote is higher than agreed upon final price, you do NOT need new letter from contractor.

Use the SPREADSHEETS on the website IF THEY ARE APPLICABLE. Those are meant as guides, but if it does not work for your estimate, you do NOT have to use them. Use whatever means you think will work.

REFER TO EXAMPLES

Contract Changes

Contract Administration Update Training
FDOT-District 5 November, 2006

Work Orders and Supplemental Agreements

JULY 2004 lettings and later

Labor Burden

Get the certified amount at the Pre-construction conference.

The idea is to SIMPLIFY your life, not make it more complicated.

Quickly glance over the certified burden rate to make sure it only includes what spec say it can include:

Item	Rate
FICA	Rate established by Law
FUTA/SUTA	Rate established by Law
Medical Insurance	Actual
Holidays, Sick & Vacation benefits	Actual
Retirement benefits	Actual
Workers Compensation	Rates based on the National Council on Compensation Insurance basic rate tables adjusted by Contractor's actual experience modification factor in effect at the time of the additional work or unforeseen work.
Per Diem	Actual but not to exceed State of Florida's rate
Insurance*	Actual
*Compensation for Insurance is limited solely to General Liability Coverage and does not include any other insurance coverage (such as, but not limited to, Umbrella Coverage, Automobile Insurance, etc.).	

Highway contractor: Reasonable: 30-45%

Bridge contractor: Reasonable 40-60%

If the rates submitted include other items, or are outside the reasonable range, forward to District Construction office.

C-2

Contract Changes

Contract Administration Update Training
FDOT-District 5 November, 2006

Work Orders and Supplemental Agreements

Bond Calculation July 2004 lettings and later

Not automatically 1.5% (see EXAMPLE and DCE memo)

No bond mark up on Initial Contingency pay item

Allowable Mark Ups July 2004 lettings and later

Now 17.5% on Labor (plus burden), Materials and Equipment

Subs get their L,E.M marked up as well

Zero dollar spec change

All you have to do is write a Work Order incorporating the changes described in the DCE memo, and include a copy of the memo on the work order. No other District or Central Office signatures needed.

Certifications July 2004 lettings and later

Not needed if contractor submitting a quote based on a request from FDOT.

Not required before DRB if contractor is only going for ENTITLEMENT and has not yet put dollars or time to issue.

Required for ALL unsolicited requests for specific time and/or money.

THIS FORMAT "NOT MANDATORY"

Entitlement Analysis

FIN: 242484 2 52 01
Contract No.: T5102

Date Prepared: 6/7/2006
CEI Consultant: HNTB Corporation
Senior Project Engineer: Virgil Rook, P.E.

Clean up area near Detour 1.

NOTE: THIS FORMAT MAKES YOU ADDRESS ALL THE PERTINENT INFO.

The Contractor is entitled to the full negotiated price for the additional work to clean up debris left by others during utility relocation work within the Detour 1 work area. The debris which came from an unknown source resulting in an unforeseen condition included concrete rubble, broken concrete pipe, and trash. The Engineer's Estimate for this work totals $5,910.14 which is $2,678.14 (45%) more than the Contractor's Cost proposal of $3,232.00. After reviewing the Contractor's Cost proposal HNTB has determined the Engineer's Estimate overestimated the amount of time required to remove the debris. HNTB recommends accepting the Contractor's Cost proposal of $3,232.00.

NOTE: This can work both ways. If Engineers Estimate is LESS than contractor proposal, you can Explain how you "resolve" those differences.

Buckslip Code: ~~1080NN~~ 503.0NN

There are no time adjustments associated with this Field Supplemental Agreement.

There is no premium price associated with this Field Supplemental Agreement.

Example

COST ESTIMATE FOR
INCREASE, DECREASE OR ALTERATION IN THE WORK (Spec. 4-3.2)

FIN#: 242484-2-52 Contract #: T5102 Fed Proj. #: 0042-222-1
Point of Contact (Name/Phone #): Virgil E. Rook, P.E. / (407) 648-0476
Email Address: vrook@hntb.com
Estimate Prepared By: Lisa Jones
Company: HNTB

Signature

6-13-06
Date

****

CONTRACTOR	CLEAN UP AROUND DETOUR 1	
a) LABOR and BURDEN		$ 1,746.48
b) MATERIALS AND SUPPLIES		$ -
c) EQUIPMENT		$ 3,283.42
d) INDIRECT COST, EXPENSES, AND PROFIT		$ 880.23
		$ 5,910.14

SUB-CONTRACTOR		
a) LABOR and BURDEN		$ -
b) MATERIALS AND SUPPLIES		$ -
c) EQUIPMENT		$ -
d) INDIRECT COST, EXPENSES, AND PROFIT		$ -
		$ -

SUB-CONTRACTOR	0	
a) LABOR and BURDEN		$ -
b) MATERIALS AND SUPPLIES		$ -
c) EQUIPMENT		$ -
d) INDIRECT COST, EXPENSES, AND PROFIT		$ -
		$ -

SUB-CONTRACTOR	0	
a) LABOR and BURDEN		$ -
b) MATERIALS AND SUPPLIES		$ -
c) EQUIPMENT		$ -
d) INDIRECT COST, EXPENSES, AND PROFIT		$ -
		$ -

SUB-CONTRACTOR	0	
a) LABOR and BURDEN		$ -
b) MATERIALS AND SUPPLIES		$ -
c) EQUIPMENT		$ -
d) INDIRECT COST, EXPENSES, AND PROFIT		$ -
		$ -

SUB-CONTRACTOR	0	
a) LABOR and BURDEN		$ -
b) MATERIALS AND SUPPLIES		$ -
c) EQUIPMENT		$ -
d) INDIRECT COST, EXPENSES, AND PROFIT		$ -
		$ -

TOTAL COST OF INCREASE, DECREASE OR ALTERATION IN THE WORK $ 5,910.14

EXAMPLE p.2

COST ESTIMATE FOR
INCREASE, DECREASE OR ALTERATION IN THE WORK (Spec. 4-3.2)

FIN#: 242484-2-52 Contract #: T5102 Fed Proj. #: 0042-222-1
Point of Contact (Name/Phone #): Virgil E. Rook, P.E. / (407) 648-0476
Email Address: vrook@hntb.com
Estimate Prepared By: Lisa Jones
Company: HNTB

CONTRACTOR: CLEAN AROUND DETOUR 1

a) LABOR

LABOR	TIME	UNIT	RATE	BURDEN (%)	LABOR plus BURDEN SUB-TOTAL
FOREMAN / OP	16.00	HR	$ 24.00	51.08%	$ 580.15
OPERATOR	16.00	HR	$ 12.00	51.08%	$ 290.07
LABOR (3)	48.00	HR	$ 10.00	51.08%	$ 725.18
DRIVER	10.00	HR	$ 10.00	51.08%	$ 151.08
					$ -
					$ -
					$ -
					$ -
					$ -

TOTAL LABOR and BURDEN $ 1,746.48

b) MATERIALS AND SUPPLIES

MATERIAL	QTY.	UNIT	RATE	SUB-TOTAL
				$ -
				$ -
				$ -
				$ -
				$ -
				$ -
				$ -
				$ -
				$ -

TOTAL MATERIALS AND SUPPLIES $ -

Example p-3

COST ESTIMATE FOR
INCREASE, DECREASE OR ALTERATION IN THE WORK (Spec. 4-3.2)

FIN#: 242484-2-52 Contract #: T5102 Fed Proj. #: 0042-222-1
Point of Contact (Name/Phone #): Virgil E. Rook, P.E. / (407) 648-0476
Email Address: vrook@hntb.com
Estimate Prepared By: Lisa Jones
Company: HNTB

c) EQUIPMENT

EQUIPMENT	OPERATING		STAND-BY / IDLE		
	FHWA Rate w/ Adjustments	HRS	50% of Ownership Cost w/ Adjustments	HRS	SUB-TOTAL
UTILITY TRUCK (2)	$ 9.38	32.00			$ 300.16
LOADER (2)	$ 52.23	32.00			$ 1,671.36
FLAT BED TRUCK 4WD	$ 18.19	10.00			$ 181.90
DUMPSTER (2) WEEKLY FEE *	$ 565.00	2.00			$ 1,130.00
* INCLUDES DUMP FEES					$ -
					$ -
					$ -
					$ -

TOTAL EQUIPMENT $ 3,283.42

d) INDIRECT COST, EXPENSES, AND PROFIT (1) or (2), whichever is greater)

(1) 17.5% of the sum of a), b), & c) above: $ 880.23

(1)(i) BOND: For any additional bond for the additional or unforeseen work, the Contractor shall provide clear and convincing proof that the bond has actually been provided and paid for a separate bond premium for such additional or unforeseen work.

(1)(ii) SUBCONTRACTOR MARKUP:

Subcontractor Cost for Extra Work:		$ -	
First $50,000	10%	$ -	$ -
Over $50,000	5%	$ -	$ -
			$ 880.23

(2) Average overhead per day:

A	Original Contract Amount	$	118,920,731.95
B	Original Contract Time		900
C	8%		
D =	$\frac{A \times C}{B}$	$	10,570.73

Calendar days of entitlement that are in excess of the first 10 cumulative entitlement calendar days for the contract: $ -

TOTAL INDIRECT COST, EXPENSES, AND PROFIT $ 880.23

Example p.4

EQUIPMENT WATCH

www.equipmentwatch.com

Rental Rate Blue Book

Date:
Wednesday, May 17, 2006

On-Highway Light Duty Trucks
Miscellaneous Models

Configuration for On-Highway Light Duty Trucks

Power Mode : **Gasoline**
Axle Config. : **4X2**
HP : **130.0**

Cab Type : **Crew**
Ton Rating : **1/2**

Blue Book Rates

** FHWA Rate is equal to the monthly ownership cost divided by 176 plus the hourly estimated operating cost.

	Ownership Costs				Estimated Operating Costs	FHWA Rate **
	Monthly	Weekly	Daily	Hourly	Hourly	Hourly
Published Rates	$560.00	$155.00	$39.00	$6.00	$6.30	$9.48
Adjustments						
Region (Florida: 96.9%)	- $17.36	- $4.81	- $1.21	- $0.19		
Model Year (100%)	-	-	-	-		
Ownership (100%)	-	-	-	-		
Operating (100%)					-	
Total:	**$542.64**	**$150.19**	**$37.79**	**$5.81**	**$6.30**	**$9.38**

Rate Element Allocation

Element	Percentage	Value
Depreciation	58%	$324.80
Overhaul	27%	$151.20
CFC	6%	$33.60
Indirect	9%	$50.40
Monthly Ownership Cost	100%	$560.00

Revised Date: 2nd Half 2005

Back to Rental Rate Blue Book Results

Print Page

Start a New Search

Example p.5

EQUIPMENT WATCH

www.equipmentwatch.com

Rental Rate Blue Book

Date:
Wednesday, May 17, 2006

Deere 644H (discontinued 2004)
4-WD Articulated Wheel Loaders

Size Class:
Net Hp: 175 - 199 HP
Weight:
38,876 lbs

Equipment Notes: Includes General Purpose bucket and ROPS, unless otherwise noted.

Configuration Notes: with EROPS

Configuration for 644H

Power Mode : **Diesel**
HP : **180.0**

Bucket Capacity :**4.25 cy**

Blue Book Rates

** FHWA Rate is equal to the monthly ownership cost divided by 176 plus the hourly estimated operating cost.

	Ownership Costs				Estimated Operating Costs	FHWA Rate **
	Monthly	Weekly	Daily	Hourly	Hourly	Hourly
Published Rates	$5,160.00	$1,445.00	$360.00	$54.00	$24.35	$53.67
Adjustments						
Region (Florida: 95.1%)	- $252.84	- $70.81	- $17.64	- $2.65		
Model Year (100%)	-	-	-	-		
Ownership (100%)	-	-	-	-		
Operating (100%)					-	
Total:	**$4,907.16**	**$1,374.20**	**$342.36**	**$51.35**	**$24.35**	**$52.23**

Rate Element Allocation

Element	Percentage	Value
Depreciation	45%	$2,322.00
Overhaul	30%	$1,548.00
CFC	15%	$774.00
Indirect	10%	$516.00
Monthly Ownership Cost	100%	**$5,160.00**
Revised Date: 2nd Half 2005		

Back to Rental Rate Blue Book Results

Print Page

Start a New Search

Example p. 6

EQUIPMENT WATCH

www.equipmentwatch.com

Rental Rate Blue Book

Date:
Monday, Jun 5, 2006

On-Highway Flatbed Trucks
Miscellaneous Models

Configuration for On-Highway Flatbed Trucks

Power Mode : **Gasoline**
Maximum GVW : **10,000 lbs**

Axle Config. : **4X4**
HP : **180.0**

Blue Book Rates

** FHWA Rate is equal to the monthly ownership cost divided by 176 plus the hourly estimated operating cost.

	Ownership Costs				Estimated Operating Costs	FHWA Rate **
	Monthly	Weekly	Daily	Hourly	Hourly	Hourly
Published Rates	$725.00	$205.00	$51.00	$8.00	$14.20	$18.32
Adjustments						
Region (Florida: 96.9%)	- $22.48	- $6.36	- $1.58	- $0.25		
Model Year (100%)	-	-	-	-		
Ownership (100%)	-	-	-	-		
Operating (100%)					-	
Total:	**$702.52**	**$198.64**	**$49.42**	**$7.75**	**$14.20**	**$18.19**

Rate Element Allocation

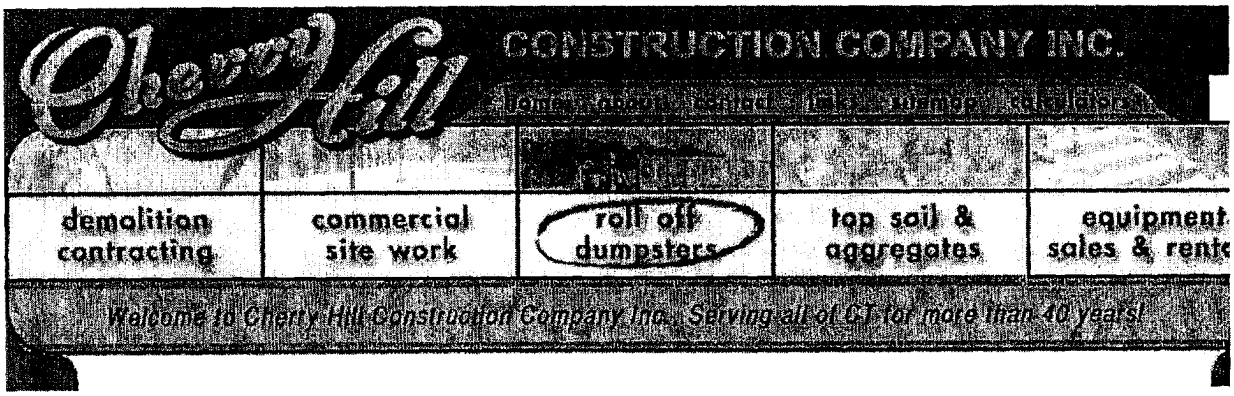
Element	Percentage	Value
Depreciation	50%	$362.50
Overhaul	29%	$210.25
CFC	8%	$58.00
Indirect	13%	$94.25
Monthly Ownership Cost	**100%**	**$725.00**
Revised Date: 2nd Half 2005		

Back to Rental Rate Blue Book Results

Print Page

Start a New Search

Example p.7



Roll Off Dumpsters

Cherry Hill Construction Co. Inc offers 8, 10, 12, 15, 20, 30, and 40 yd residential and commercial dumpsters for clean up, construction and other projects. As an industry leader, we provide service that is prompt, professional, and courteous. We are happy to help you select the container that best fits your needs. Cherry Hill provides same or next-day quality service.

Our rates and terms are very competitive. Pricing includes delivery, pickup, and disposal of material up to container capacity. We own and operate our own transfer facility in an effort to provide the fastest and most competitive service.

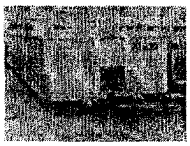
Call For Orders - 203.488.7929
Or Email Us

Please refer below to a list of **acceptable and unacceptable** materials for our dumpsters.

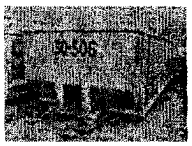
Viewing **Medium Containers:** Cherry Hill offers containers at or below 30 yards in capacity for large residential disposals or small and medium sized industrial projects.

select a category:
Small Containers
Medium Containers
Large Containers

15 YD - 3 TON
$350 New Haven & Middlesex Counties - $385 Elsewhere



20 YD - 4 TON
$425 New Haven & Middlesex Counties - $455 Elsewhere



30YD - 5 TON
$525 New Haven & Middlesex Counties - $565 Elsewhere

EXCELLENT

Estimate only price for Florida comparable

Example p.8

CONSTRUCTION LEADERS

June 5, 2006

Mr. Virgil Rook, P.E.
Resident Engineer
HNTB CORPORATION
526 S Division Ave.
Orlando, Florida 32805

Letter No. HNTB-L-066
File No. 5505003-1-G

Re: I-4 & SR 408 Expressway Interchange
FDOT Project No: 24248425201
Contract No. T5102; Orange County
CRX-013 – DETOUR No. 1 CLEANUP

Dear Mr. Rook:

In accordance with the Contract between Florida Department Of Transportation and PCL Civil Constructors, Inc.; section 4-3.5 Entitled: "Extra Work", we are enclosing for your review and approval the cost summary for the ***Additional work required for cleanup at Detour No. 1.*** This cost proposal was prepared at the request of HNTB. Pricing for this work is in accordance with the FDOT Standard Specifications and Contract T5102.

Should you have any questions regarding this matter, or require additional information, contact our office.

Sincerely,

PCL CIVIL CONSTRUCTORS, INC.

Gary R. Dale
Project Manager

GRD:JB:ng

Enclosure

cc: J. Moore, J. Holtje, J. Bowman

RECEIVED
JUN 7 2006
HNTB

PCL CIVIL CONSTRUCTORS, INC.
530 S Division Ave., Orlando, FL 32805
Telephone: 407-872-7900 ☎ Fax: 407-872-7901

Example p.9

Detour #1 Cleanup
CRX - 013
NARRATIVE OF EVENTS

The additional work included in CRX-013 represents the costs associated with the cleanup of the work area at Detour #1 consists of debris left by others. The work includes the use of a 20 cy and 30 cy dumpster to remove the debris. This is additional work requested by the Department in order for PCL to begin work at this location. The plans and specifications do not depict this work.

This work is additional in accordance with contract section: 9.1 which states:

Adjustment to Contract Price: The CONTRACTOR agrees that it will receive additional compensation for:

4-3. Alterations of Plans or of Character of Work as noted in the specifications

4-4. Unforeseeable Work as noted in the specifications.

Summary:

This change represents an owner requested proposal to cleanup special detour #1.

The value of this CRX is ~~$3,280.00~~. $3,232.00

6-8-06 Lin A Jones

STILL MADE CONTRACTOR FOLLOW SPECS ON MARK-UPS etc. even though we could support $. Good catch

Example p. 10

CRX-013
Detour #1 Area Cleanup

DESCRIPTION COST SUMMARY	UNIT MEASURE	QUANTITY		UNIT RATE	TOTAL
Detour #1 Area Cleanup	1.00	Ls			$ 3,232.00
BOND & INSURANCE	1.50%				$ ~~48.00~~
Sub Total					$ ~~3,280.00~~
TOTAL	$ 3,280.00				$ 3,280

Not Allowed
$ 3,232.00
6-8-06

NO BOND
(INITIAL OK)

Example p.11

CRX-013 Detour #1 Area Cleanup						
DESCRIPTION	QUANTITY	U.O.M.	UNIT RATE	SUB TOTAL	MARK UP	TOTAL
Detour #1 Area Cleanup			incl burden			
LABOR						
Roadway Foreman	4.00	Hrs	$45.32	$181		
Operator Roadway Equipment	8.00	Hrs	$27.19	$218		
TOTAL				**$399**		**$399**
EQUIPMENT						
Ford 1/2 Ton Pickup	4.00	Hrs	$9.59	$38		
IT 28 CAT Loader	8.00	Hrs	$39.84	$319		
TOTAL				**$357**		**$357**
MATERIAL						
Metro Waste						
20 CY Dumpster	7.00	EA	$215.00	$1,505		
30 CY Dumpster	1.00	EA	$250.00	$250		
Extra Dump Fee for Mix Debris	3.00	EA	$80.00	$240		
TOTAL				$1,995		**1,995.00**
SUBCONTRACT						
				$ -		
SUBGUARD BOND @ 1%				$ -		
TOTAL				$ -		-
MARK UP L, E, & M			17.50%		$ 481.40	
MARK UP SUBCONTRACTOR			10.00%		$ -	
						$ 481.40
TOTAL						**$ 3,232**

Example p. 12

ROUTING INQUIRY LISTING

CONTRACTOR BACK-UP

COMPLETED INFORMATION

Customer: 076385
Name: PCL CONSTRUCTION
Address: 3810 NORTHDALE BLVD

Site: 0001
Name: PCL CIVIL CONSTRUCTORS
Address: 530 S DIVISION

Service: 003
Service Type: 20.0 Open Top Temp

Service	Type	WO	Date	Day	Route	Sequence	Activity	Lifts	Reference	Invoiced	Amount
* 003	OT	160651	May 19, 2006	Friday	430	0.04	Dump & Return (C&D)	1.00	ERIC	May 19, 2006	$215.00
003	OT	159921	May 16, 2006	Tuesday	413	0.04	Pull & Keep (C&D)	1.00	PER JOHN	May 16, 2006	$215.00
003	OT	159922	May 16, 2006	Tuesday	413	0.03	Pull & Keep (C&D)	1.00	PER JOHN	May 16, 2006	$215.00
003	OT	159923	May 16, 2006	Tuesday	413	0.02	Dump & Return (C&D)	1.00	PER JOHN	May 16, 2006	$215.00
003	OT	159147	May 11, 2006	Thursday	405	0.05	Delivery	1.00	PER JAMIE	May 11, 2006	$0.00
003	OT	159149	May 11, 2006	Thursday	405	0.04	Delivery	1.00	PER JAMIE	May 11, 2006	$0.00
003	OT	158717	May 09, 2006	Tuesday	422	0.04	Delivery	1.00	PER JAMIE	May 09, 2006	$0.00

* INDICATES $80- EXTRA FEE FOR MIXED DUMP MATERIALS

Example P.13

COMPLETED INFORMATION

Customer: 076385
Name: PCL CONSTRUCTION
Address: 3810 NORTHDALE BLVD

Site: 0001
Name: PCL CIVIL CONSTRUCTORS
Address: 530 S DIVISION

Service: 004
Service Type: 30.0 Open Top Temp

	Service	Type	WO	Date	Day	Route	Sequence	Activity	Lifts	Reference	Invoiced	Amount
*	004	OT	159824	May 16, 2006	Tuesday	413	0.01	Pull & Keep (C&D)	1.00	PER JOHN	May 16, 2006	$250.00
	004	OT	158718	May 09, 2006	Tuesday	422	0.03	Delivery	1.00	PER JAMIE	May 09, 2006	$0.00

* INDICATES $80- EXTRA FEE FOR MIXED DUMP MATERIALS

Example p. 14

ROUTING INQUIRY LISTING

COMPLETED INFORMATION

Customer: 076385
Name: PCL CONSTRUCTION
Address: 3810 NORTHDALE BLVD

Site: 0002
Name: PCL CIVIL CONSTRUCTORS
Address: CORNER DIVISION AVE & CARTER RD

Service: 001
Service Type: 20.0 Open Top Temp

Service	Type	WO	Date	Day	Route	Sequence	Activity	Lifts	Reference	Invoiced	Amount
* 001	OT	158967	May 10, 2006	Wednesday	407	0.02	Dump & Return (C&D)	1.00	JEFF	May 10, 2006	$215.00
001	OT	158958	May 09, 2006	Tuesday	415	0.10	Delivery	1.00	JEFF	May 09, 2006	$0.00
001	OT	156234	Apr 25, 2006	Tuesday	422	0.10	Relocate	1.00	JEFF	Apr 25, 2006	$25.00
001	OT	156041	Apr 22, 2006	Saturday	405	0.03	Dump & Return (C&D)	1.00	PER JEFF	Apr 22, 2006	$215.00
001	OT	152066	Mar 31, 2006	Friday	422	0.02	Dump & Return (C&D)	1.00	PER TODD	Mar 31, 2006	$215.00
001	OT	144199	Feb 10, 2006	Friday	411	0.03	Delivery	1.00	PER SETH	Feb 10, 2006	$0.00

* INDICATES $80- EXTRA DUMP FEE FOR MIXED MATERIALS.

Exhibit P.15

Joe Wilson
5/17/06

ENGINEERS ENTITLEMENT ANALYSIS

CHANGE

PAVING OF THE BAIT SHACK PARKING LOT.

ANALYSIS

AS PER THE RIGHT OF WAY AGREEMENT WE WERE TO REPAVE THE BAIT SHACK PARKING LOT ON OLD SR-44.

THE CONTRACTOR IS ENTITLED TO COMPENSATION PER STANDARD SPEC. 4-3.2.

ANOTHER EXAMPLE P.1

Joe Wilson

ENGINEERS COST ESTIMATE 5-8-06

SUBCONTRACTOR TRUCKING WAS ARRIVED AT BY USING THE RENTAL BLUE BOOK RATE PLUS THE DRIVER'S HOURLY RATE.
35.67 + 19.33 = $55.00 PER HOUR

TRASH DISPOSAL FOR THIS AREA IS ABOUT $100.00 PER LOAD.

ON MAY 12, 2006 WE NEGOTIATED THE PRICE FOR THE REMOVAL & REINSTALLING OF CONC. PARKING BUMPER'S & THE ASPHALT CURB, ALONG WITH THE PARKING LOT STRIPING. THE ORIGINAL PRICE FROM DAB WAS $5021.70. THE PRICE AGREED TO WAS ENGINEERS COST ESTIMATE OF $3,639.97.

THEREFORE THE WORK ORDER WILL BE WRITTEN FOR $3,639.97.

ANOTHER EXAMPLE P.2

ENGINEER'S COST ESTIMATE

FIN: 238315-1-52-01	Contract No.: T-5059	FAP NO.:	
Description of Work:	(Bait Shack) Remove & reinstall bumpers and Asphalt Curb		

COSTS OF LABOR	QTY	TIME	UNIT		RATE		SUBTOTALS
Loader Operator	1	12	HRS	@	$25.12	=	$301.44
Transport Driver	1	9	HRS	@	$22.80	=	$205.20
Labor	3	12	HRS	@	$13.74	=	$164.88
			LABOR MARKUP			25%	$167.88
			LABOR BURDEN				$0.00
			LABOR SUBTOTAL				$839.40

COSTS OF EQUIPMENT	QTY	TIME	UNIT		RATE		SUBTOTALS
WA 320-5 Loader	1	12	HRS	@	$41.18	=	$494.16
Transport	1	9	HRS	@	$65.05	=	$585.45
Plate Compactor	1	12	HRS	@	$13.93	=	$167.16
Pick-up	1	12	HRS	@	$10.31	=	$123.72
			HRS	@		=	$0.00
			EQUIPMENT MARKUP			7.50%	$102.79
			EQUIPMENT SUBTOTAL				$1,473.28

MATERIALS	QTY		UNIT		RATE		SUBTOTALS
Form For Asphalt Curb	1		EA	@	$100.00	=	$100.00
				@		=	$0.00
			MATERIAL MARKUP			17.50%	$17.50
			MATERIAL SUBTOTAL				$117.50

MASC. - NO MARKUPS

Trash Disposal	1			@	$100.00		$100.00
			MASC. SUBTOTAL				$100.00

Sub Markups

Sub Trucking	1	2	HRS	@	$55.00	=	$110.00
Striping	1		LS	@	$850.00	=	$850.00
	1	$960.00	@		10.00%	=	$96.00
			SUB SUBTOTAL				$1,056.00

BOND

ALLOWABLE BOND		$3,586.18	@		1.50%	=	$53.79

TOTAL	$3,639.97 TBE
	$ 5021.70 DAB
	$1381.73 DIFF

Time granted	Days
Engineer's Cost	$3,639.97
Premium Cost	$3,639.97

Joe Wilson
Signature, Title

5-8-06 (12)
Date JW

ANOTHER EXAMPLE p.3

[redacted]

ENGINEER'S COST ESTIMATE

FIN: 238315-1-52-01	Contract No.:	T-5059	FAP NO.:	
Description of Work:	(Bait Shack) Striping			

Traffic Services

COSTS OF LABOR	QTY	TIME	UNIT		RATE		SUBTOTALS
Truck Driver	1	5	HRS	@	$25.00	=	$125.00
			HRS	@		=	$0.00

LABOR MARKUP	25%	$31.25
LABOR BURDEN		$0.00
LABOR SUBTOTAL		$156.25

COSTS OF EQUIPMENT	QTY	TIME	UNIT		RATE		SUBTOTALS
Striping Truck	1	5	HRS	@	$31.52	=	$157.60
			HRS	@		=	$0.00
EQUIPMENT MARKUP						7.50%	$11.82
EQUIPMENT SUBTOTAL							$169.42

MATERIALS	QTY		UNIT		RATE		SUBTOTALS
150mm White	0.036		NK	@	$428.00	=	$15.41
			Ea	@		=	$0.00
MATERIAL MARKUP						17.50%	$2.70
MATERIAL SUBTOTAL							$18.10

MISC - NO MARKUPS

Mobilization	1	5	HRS	@	$100.00		$500.00
MISC SUBTOTAL							$500.00

Sub Markups

	1	$0.00	@		10.00%	=	$0.00
MARK-UPS SUBTOTAL							$0.00

BOND

ALLOWABLE BOND			@			=	$0.00

TOTAL	$843.77

Time granted	Days
Engineer's Cost	$843.77
Premium Cost	$843.77

Signature, Title Joe Wilson

5-8-06
Date

THE SUB CONTRACTOR [illegible]

ANOTHER EXAMPLE p.4

[illegible] TBE

Florida Department of Transportation

JEB BUSH
GOVERNOR

605 Suwannee Street MS # 31
Tallahassee, FL 32399-0450

DENVER J. STUTLER, JR.
SECRETARY

December 12, 2005

DCE MEMORANDUM NO. 32-05
(FHWA Approval: 12-12-05)

TO: **DISTRICT CONSTRUCTION ENGINEERS**

FROM: Brian Blanchard, Director, Office of Construction

COPIES: David Sadler, Don Davis (FHWA), Bob Burleson (FTBA)

SUBJECT: **PAYMENT OF BOND FOR EXTRA WORK**

This memo is being sent out in an effort clarify how payment of bond for extra work shall be paid and to ensure that it is paid in a consistent manner statewide.

Projects Let after July, 2004 includes the following language in specification 4-3.2.1:

(i) Bond: The Contractor will receive compensation for any premium for acquiring a bond for such additional or unforeseen work; provided, however, that such payment for additional bond will only be paid upon presentment to the Department of clear and convincing proof that the Contractor has actually provided and paid for separate bond premiums for such additional or unforeseen work in such amount.

Payment of bond on additional work shall be as follows:

- Bond will **NOT** be paid for additional work paid by the **initial contingency pay item** included in the contract. The initial contingency amount is included in the original contract amount and covered by the contract bond.

- Bond **will be paid** for work added by Supplemental Agreement or by a Work Order on a Contingency Supplemental Agreement. The payment of the bond will be at the contract bond rate as calculated from the information contained in the *Contract Affidavit* , which can be found in your contract documents, as follows:

$$\text{Bond Rate \%} = \frac{\text{Bond Premium}}{\text{Original Contract Amount}} \times 100$$

Contract Changes

Time Extension Requests

Specification for Contract Time Extensions
2007 Florida Standard Specifications for Road and Bridge Construction

8-7.3.2 Contract Time Extensions: The Department may grant an extension of Contract Time when a controlling item of work is delayed by factors not reasonably anticipated or foreseeable at the time of bid. The Department may allow such extension of time only for delays occurring during the Contract Time period or authorized extensions of the Contract Time period. When failure by the Department to fulfill an obligation under the Contract results in delays to the controlling items of work, the Department will consider such delays as a basis for granting a time extension to the Contract.

Whenever the Engineer suspends the Contractor's operations, as provided in 8-6, for reasons other than the fault of the Contractor, the Engineer will grant a time extension for any delay to a controlling item of work due to such suspension. The Department will not grant time extensions to the Contract for delays due to the fault or negligence of the Contractor.

The Department does not include an allowance for delays caused by the effects of inclement weather or suspension of Contractor's operations due to holidays as defined in 8-6.4, in establishing Contract Time. The Engineer will continually monitor the effects of weather and, when found justified, grant time extensions on either a bimonthly or monthly basis. The Engineer will not require the Contractor to submit a request for additional time due to the effects of weather.

The Department will grant time extensions, on a day for day basis, for delays caused by the effects of rains or other inclement weather conditions, related adverse soil conditions or suspension of operations due to holidays that prevent the Contractor from productively performing controlling items of work resulting in:

(1) The Contractor being unable to work at least 50% of the normal work day on pre-determined controlling work items due to adverse weather conditions, holiday suspension; or

(2) The Contractor must make major repairs to work damaged by weather, provided that the damage is not attributable to the Contractor's failure to perform or neglect; and provided that the Contractor was unable to work at least 50% of the normal workday on pre-determined controlling work items.

No additional compensation will be made for delays caused by the effects of inclement weather.

The Department will consider the delays in delivery of materials or component equipment that affect progress on a controlling item of work as a basis for granting a time extension if such delays are beyond the control of the Contractor or supplier. Such delays may include an area-wide shortage, an industry-wide strike, or a natural disaster that affects all feasible sources of supply. In such cases, the Contractor shall furnish substantiating letters from a representative number of manufacturers of such materials or equipment clearly confirming that the delays in delivery were the result of an area-wide shortage, an industry-wide strike, etc. No additional compensation will be made for delays caused by delivery of materials or component equipment.

The Department will not consider requests for time extension due to delay in the delivery of custom manufactured equipment such as traffic signal equipment, highway lighting equipment, etc., unless the Contractor furnishes documentation that he placed the order for such equipment in a timely manner, the delay was caused by factors beyond the manufacturer's control, and the lack of such equipment caused a delay in progress on a controlling item of work. No additional compensation will be paid for delays caused by delivery of custom manufactured equipment.

The Department will consider the affect of utility relocation and adjustment work on job progress as the basis for granting a time extension only if all the following criteria are met:

(1) Delays are the result of either utility work that was not detailed in the plans, or utility work that was detailed in the plans but was not accomplished in reasonably close accordance with the schedule included in the Contract Documents.

(2) Utility work actually affected progress toward completion of controlling work items.

(3) The Contractor took all reasonable measures to minimize the effect of utility work on job progress, including cooperative scheduling of the Contractor's operations with the scheduled utility work at the preconstruction conference and providing adequate advance notification to utility companies as to the dates to coordinate their operations with the Contractor's operations to avoid delays.

As a condition precedent to an extension of Contract Time the Contractor must submit to the Engineer:

A preliminary request for an extension of Contract Time must be made in writing to the Engineer within ten calendar days after the commencement of a delay to a controlling item of work. If the Contractor fails to submit this required preliminary request for an extension of Contract Time, the Contractor fully, completely, absolutely and irrevocably waives any entitlement to an extension of Contract Time for that delay. In the case of a continuing delay only a single preliminary request for an extension of Contract Time will be required. Each such preliminary request for an extension of Contract Time shall include as a minimum the commencement date of the delay, the cause of the delay, and the controlling item of work affected by the delay; and

Further, the Contractor must submit to the Engineer a request for a Contract Time extension in writing within 30 days after the elimination of the delay to the controlling item of work identified in the preliminary request for an extension of Contract Time. Each request for a Contract Time extension shall include as a minimum all documentation that the Contractor wishes the Department to consider related to the delay, and the exact number of days requested to be added to Contract Time. If the Contractor contends that the delay is compensable, then the Contractor shall also be required to submit with the request for a Contract Time extension a detailed cost analysis of the requested additional compensation. If the Contractor fails to submit this required request for a Contract Time extension, with or without a detailed cost analysis, depriving the Engineer of the timely opportunity to verify the delay and the costs of the delay, the Contractor waives any entitlement to an extension of Contract Time or additional compensation for the delay.

Upon timely receipt of the preliminary request of Contract Time from the Contractor, the Engineer will investigate the conditions, and if it is determined that a controlling item of work is being delayed for reasons beyond the control of the Contractor the Engineer will take appropriate action to mitigate the delay and the costs of the delay. Upon timely receipt of the request for a Contract Time extension the Engineer will further investigate the conditions, and if it is determined that there was an increase in the time or the cost of performance of the controlling item of work beyond the control of the Contractor, then an adjustment of Contract Time will be made, and a monetary adjustment will be made, excluding loss of anticipated profits, and the Contract will be modified in writing accordingly.

The existence of an accepted schedule, including any required update(s), as stated in 8-3.2, is a condition precedent to the Contractor having any right to the granting of an extension of contract time or any monetary compensation arising out of any delay. Contractor failure to have an accepted schedule, including any required update(s), for the period of potential impact, or in the event the currently accepted schedule and applicable updates do not accurately reflect the actual status of the project or fail to accurately show the true controlling or non-controlling work activities for the period of potential impact, will result in any entitlement determination as to time or money for such period of potential impact being limited solely to the Department's analysis and identification of the actual controlling or non-controlling work activities. Further, in such instances, the Department's determination as to entitlement as to either time or compensability will be final, unless the Contractor can prove by clear and convincing evidence to a Disputes Review Board that the Department's determination was without any reasonable factual basis.

Time Extension Requests

For the submittal of the time extension request to the **District Construction Engineer** approval, the project administrator must submit the following information through d5_time@dot.state.fl.us

1. Letters from the Contractor
   - Preliminary request of time extension
   - Request of time extension
   - Any additional data

2. Project Administrator Time Entitlement Analysis
   - Include a description of the issue.
   - Include location (stations).
   - Copy of plans pages that shows the work been considered. In a case of added work or changes, add a copy of the plans revisions.
   - Always include dates for the issue.
   - Indicate if the days are compensable or non compensable
   - Summary of your recommendation at the end of the page.

3. Contract Time Table
   - In the legend include a short description of the FSA and SA Ex. SA#8 Soil Removal 102+15 to 103+25
   - Send the excel file or a color pdf copy. Black & white copies are not easy to be evaluated.

4. Critical Path Method Schedules
   - A schedule before the delay and after must be submitted for evaluation with the corresponding activity added in the (after) schedule.
   - Check that the schedule submitted by the contractor is the one been used and that is not just a formality to comply with the specifications.

5. Include any additional back up data that is necessary for the evaluation of the time request.

Note: Identify all the submitted files with the project FIN number in front followed by a description of the file.

For Contract Time Extension request due **Statewide Material Shortages**, additional to the items mentioned above, the request must contain letters from the suppliers in which the situation of the shortage is evidenced.

All the submitted Contract Time Extensions would be evaluated using FDOT Standard Specifications for Road and Bridge Construction 2007(or Project Specified) article:

8-7.3.2 Contract Time Extensions: The Department may grant an extension of Contract Time when a controlling item of work is delayed by factors not reasonably anticipated or foreseeable at the time of bid. The Department may allow such extension of time only for delays occurring during the Contract Time period or authorized extensions of the Contract Time period. When failure by the Department to fulfill an obligation under the Contract results in delays to the controlling items of work, the Department will consider such delays as a basis for granting a time extension to the Contract.

Whenever the Engineer suspends the Contractor's operations, as provided in 8-6, for reasons other than the fault of the Contractor, the Engineer will grant a time extension for any delay to a controlling item of work due to such suspension. The Department will not grant time extensions to the Contract for delays due to the fault or negligence of the Contractor.

The Department does not include an allowance for delays caused by the effects of inclement weather or suspension of Contractor's operations due to holidays as defined in 8-6.4, in establishing Contract Time. The Engineer will continually

Other articles that deal with these claims are:

4-3.2 Increase, Decrease or Alteration in the Work
5-12.2.1 Claims for Extra Work
5-12.2.2 Claims for Delay
8-3.2 Submission of Working Schedule
8-6.4 Suspension of Contractor's Operations-Holidays
8-7.3.1 Increased Work

All submitted request has to be affecting the critical path (Shown in the CPM schedule) of the project and causing a delay. Non critical path activities would not be considered for granting time extensions.

If the Contractor time request claim does not fit the criteria for critical path and a negotiation to settle the issue is reasonable, the Project Administrator must consult with the Resident Engineer previous to commit any arrangements.

Verify that the requested days had not been previously granted or are in concurrence with other delays.

Double check any time extension estimates for additional work to be performed.

Contractor Letter for Time Extension Request

D.A.B.

DAB

Constructors, Inc.

P.O. Box 1588 - Inglis, Florida 34449
(352) 447-5488 - Fax (352) 447-4133
E-mail: KATHRYNB@dabcon.com

December 5, 2005

Mr. John Graves, PE, Senior Project Engineer
Tampa Bay Engineering
322 W. Burleigh Boulevard
Tavares, Fl. 32778

Reference:	Financial Project ID:	238315-1-52-01
	Contract No:	T-5059
	County	Lake
	Location	From a point West of Mills St.
		To a point W. of College Drive
	DAB Project No.:	371
	DAB doc#371-LOG-95c-Boxdelaycosting	

Subject: Delays at Box Culvert Site

Mr. Graves:

D.A.B. Constructors and Leware Construction submit our costs for the delay impacts at the Box Culvert Site.

Conflicts due to existing utilities, ground water processing and permit restrictions created a need to provide additional temporary critical sheet pile wall creating a delay to the construction of the box culvert.

Initial mobilization of Leware Constructions excavation equipment (Komatsu PC 400 Excavator) to excavate for the installation of soil anchors/ Box culvert sat idle two days awaiting dewatering permit issues to be resolved. Additionally, this excavation equipment sat idle seven days prior to its use in excavating for the walers on the temporary critical sheet pile wall. Leware Construction seeks 7 days for idle equipment. Cost impacts for idle equipment are $ 3,299.79 including bond.

Delay impacts for the construction of the box culvert are as follows:

Finish Soil Anchor Installation	November 3, 2005
1st Day Delay to Box Culvert Excavation	November 4, 2005
Wait for Design	
Negotiate Price	
Order Materials	November 10 2005
Delivery of Sheets	November 14, 2005
Start Sheet Pile Work	
Finish Soldier Pile and critical Wall	November 29, 3005

Tampa Bay Engineering, Inc.
File: CEI
RECVD DEC 06 2005

D.A.B. Constructors, Inc.
P.O. Box 1589
Inglis, FL. 34446

DAB

There are 26 days of direct delay to the box culvert construction. DAB requests 26 days are added to the contract time.

Schedule item 2240 (Box Culvert RT ½) shows to be a critical item of work. DAB and Leware Construction request compensation for "Indirect Impacts of Delay" per specification 5-12.6.2.2 as follows:

Leware Construction:	26 days @	$ 97.62 per day	$ 2,955.47
DAB Constructors	26 Days @	$1,769.02 per day	$45,994.52

Total for impacts of idle equipment cost and delays is $51,823.06

Sincerely,
D.A.B. Constructors, Inc.

Kathryn Barnes
Project Manager

Attachments; Leware construction costing and Letter dated 12/1/05=2 pages
DAB Detail Costing- 1 page

KB/kb

CC: File, Kb, Barry
371095c Delay Costing Sheet Pile-Box Culvert.doc

Project Administrator Time Analysis

May 22, 2006

FM No.:	238315-15201
FAP No.:	N/A
County:	Lake
Description:	SR 500 (US441) from West of Mills Ave to West of College Rd.
Contract:	T-5059

TIME ANALYSIS
SA #2 Delay due to Dewatering Permit and Added Critical Sheet Pile at new Box Culvert

Both issues #1 and #2 are on the critical path. They directly impact the following activities: #2240 New Box Right Half; #2247 Rdwy Excavation and Embankment; #2268 Stabilization; #2280 Structural Course SP-C. These items all affect activity #2870 Traffic Shift from Phase 2 to Phase 3. Following are details of the impacts which are critical.

Issue #1 – Delay due to Dewatering Permit

The Contractor planned to begin dewatering at the new Box Culvert on October 20, 2005. The FDOT had set up their CAR contractor, WRS, to provide support to prevent contaminated groundwater from migrating to the construction site and Contractor's (Leware) dewatering operation. The contractor notified TBE, WRS, and FDOT on September 23, 2005, October 10, 2005 and the date was re-confirmed on October 12, 2005.

As WRS pursued getting their permit, FDEP directed on October 18, 2005 that Leware also needed a permit and they could not pump until they had one. After discussions between FDEP, DAB and WRS, Leware was finally able to start pumping at 2:45 pm on October 21, 2005. The start date for the subcontractor installing tiebacks was delayed from October 24, 2005 to October 27, 2005. However, October 24, 2005 and October 25, 2005 were already granted as weather days, so only October 26, 2005 can be granted as a delay day. **Recommendation to grant 1 day for dewatering permit delay.**

Issue #2 – Delay for design and added work to install Critical Sheet Pile to support private property for excavation and construction of new box culvert.

The new box culvert at STA 125 +/- requires an excavation about 18 feet deep to construct. The R/W is approximately 4 ft from the edge of the new box culvert. There was also an existing – already relocated 16" water line at the R/W that had to be supported. No considerations were provided during design on how to construct a 20 ft deep hole within 5 feet of the R/W. Additional temporary sheeting was required to be able to support the excavation.

On October 12, 2005, the Contractor, CEI, and Utility owner (City of Leesburg Water Department) met to review the field conditions. The water line and property line were laid out, and it was determined that additional Critical Sheeting was necessary.

October 14, 2005, the Designers visited the site and reviewed the field conditions.
October 17, 2005, a preliminary design was forwarded from Design for review and input from the Contractor.
October 20, 2005, the final design was sent to the Contractor for pricing.
November 3, 2005, the Contractor completed tie-back testing per contract.
November 4, 2005, the Delay begins – Excavation would have started if extra sheeting not needed.
November 7, 2005, the price was settled and funds were requested from the District.
November 9, 2005, the funds were encumbered at 5:30 pm.
November 10, Work Begins, the Contractor mobilized to install extra sheeting.
November 28, 2005, the Contractor completed the installation of the added sheets.
February 23, 2006 and March 1, 2006, the Contractor removed the added sheets.

The Contractor was delayed 6 days from November 4, 2005 to November 9, 2005 waiting for design, pricing and funds to be encumbered. The Contractor performed extra work that encompassed 19 calendar days to install the added sheets, and 2 calendar days to remove the sheets. There were no weather days and 5 holidays during this period. **The total allowable added work days are 16 days. The total added time for the added sheets is 22 days.**

The total time extension recommended for the above issues is 23 Days: 7 days for delay and 16 days for extra work.

Prepared by
TBE Group

John D. Graves, P.E.,
Sr. Project Engineer

Contract Time Table

Critical Path Method Schedule

CPAM Changes for Time Extensions

Florida Department of Transportation

JEB BUSH
GOVERNOR

605 Suwannee Street
Tallahassee, FL 32399-0450

JOSÉ ABREU
SECRETARY

March 9, 2004

CONSTRUCTION BULLETIN NO. 01-04
(FA 3/8/04)

TO: **DISTRICT CONSTRUCTION ENGINEERS**

FROM: Ananth Prasad, Director, Office of Construction

COPIES: David Sadler, Randy Borgersen, Don Davis (FHWA), and Frank Rudd (FICE)

SUBJECT: **Construction Project Administration Manual (CPAM) Changes for Chapter 7 Section 2, Chapter 7 Section 3 and Chapter 7 Section 4**

Following are changes to the CPAM effective the date of this Bulletin.

Section 7.2.5(A)(4): Time Extensions for Delays Other Than Those Related to Weather

The following is added to the beginning of the paragraph in section 7.2.5(A) (4):

The Resident Engineer has the authority to approve time extension requests of 10 days per issue up to a cumulative maximum of 5% of the original contract time. The District Construction Engineer shall approve all time extension requests in excess of 10 days per issue or in excess of 5% of the original contract time. Such approvals shall be maintained in the project file.

Section 7.2.7.1(A): FHWA Oversight Projects, Resident Level Responsibilities

Section 7.2.7.1(A) has been deleted and the following substituted:

On FHWA Oversight Projects, a letter shall be prepared by the Resident Engineer on In-House CEI projects and the Department's Construction Project Manager on Consultant CEI Projects, requesting FHWA for Federal Aid participation based on the facts stated in the letter. See *Guidance Document 7-2-C* for a sample letter.

When the stamped copy of the request for a time extension indicating FHWA denial (partial or whole) is received, the Resident Engineer on In-House CEI projects and the Department's Construction Project Manager on Consultant CEI Projects, will decide whether or not to appeal the decision.

When the appeal of the FHWA's denial of a time extension receives another denial, such denial may be considered final FHWA determination, and their stamped copy of the transmittal will be distributed as previously described.

Section 7.2.7.2(A): Exempt Projects, Resident Level Responsibilities

Section 7.2.7.2(A) has been deleted and the following substituted:

(A) District Level Responsibilities

The District Construction Engineer will be responsible for deciding if a time extension should be Federal Aid participating. The guidelines contained in the latest version of the ***Exemption Agreement and 23 USC 106 Exception Process, Procedure No. 625-010-000***, as well as past precedents should be used in determining Federal Aid participation. The District Construction Engineer shall approve the number of days that are Federal-Aid Participating or Non-Participating. The District Construction Engineer can delegate such approval authority to a person within District Construction office staff, but not to a Resident Engineer, and such delegation shall be maintained in the file.

(B) Resident Level Responsibilities

The Resident Engineer will send a letter (Guidance Document 7-2-B) to the Contractor granting the additional time or denying the request, using the same codes for Reason Code, Avoidable/Unavoidable, Recovery Code, and Claim as are used on Supplemental Agreements. The approval from the District Construction Engineer, for the number of days that are Federal-Aid Participating or Non-Participating, shall be maintained in the project file.

Section 7.3: Entire Section

Replace "District Secretary or designee" with "Secretary or designee."

Section 7.3.14(A) (2): Executing and Processing Supplemental Agreement and Unilateral Payment Documents, District Level Responsibilities

The first two paragraphs through letter "d" in section 7.3.14(A) (2) have been deleted and the following is substituted:

(2) Only the Secretary of Transportation can delegate authority for approval and execution of ***Supplemental Agreements*** and ***Unilateral Payments***. That authority is delegated as follows:

a) For contract changes up to $150,000, all Supplemental Agreement and Unilateral Payment documents shall be approved by the Resident Engineer and shall be executed by the District Construction Engineer;

b) For contract changes more than $150,000 and up to $500,000, all Supplemental Agreement and Unilateral Payment documents shall be approved and executed by the District Construction Engineer; and

c) For contract changes more that $500,000, all Supplemental Agreement and Unilateral Payment documents shall be approved and executed by the Director of

Operations, except as follows, the District Construction Engineer may execute these Supplemental Agreement and Unilateral Payment documents after the Director of Operations has approved a draft copy of that Supplemental Agreement or Unilateral Payment showing the language and terms to be used.

Section 7.4.8.1: Contingency Supplemental Agreement, General

The third, fourth and fifth sentence of the first paragraph in section 7.4.8.1 has been deleted and the following substituted:

Only the Secretary of Transportation can delegate authority for approval and execution of ***Contingency Supplemental Agreements*** for the Department. The Secretary delegates the authority for approval of Contingency Supplemental Agreements to the Resident Engineer and the authority for execution of Contingency Supplemental Agreements to the District Construction Engineer.

Section 7.4.9.1(A): Field Supplemental Agreements/Work Orders, General, Resident Level Responsibilities

The first paragraph in section 7.4.9.1(A) has been deleted and the following substituted:

Authority for execution of the ***Field Supplemental Agreement/Work Order*** is delegated to the Project Administrator.

Section 7.4.9.4(A): Contract Time, Resident Level Responsibilities

The last sentence of the paragraph in section 7.4.9.4(A) has been deleted and the following substituted:

Signature authority for time extensions necessary for performance of additional work is outlined in section 7.2.

Section 7.4.9.6: FHWA Approval

Section 7.4.9.6 has been deleted and the following substituted:

(A) District Level Responsibility

Section 7.3.12, Obtaining Federal Highway Administration Approval and Participation for Construction Contract Changes on Federal-Aid Projects, list the contract changes that are Federal-Aid non-participating.

FHWA written approval for additional work or contract changes shall be obtained retroactively and documented on the ***Field Supplemental Agreement/Work Order***. FHWA may elect to approve additional work by having the ***Field Supplemental Agreement/Work Order*** sent to them for signature or by signing the ***Field Supplemental Agreement/Work Order*** at the time of a routine field visit.

The FHWA determines the participation on Federal Oversight projects, where as, the District Construction Engineer shall approve the Federal-Aid participation on Exempt Projects. The District Construction Engineer can delegate such approval authority to a person within District Construction office staff, but not to a Resident Engineer, and such delegation shall be maintained in the file.

Written documentation of the District Construction Engineer's Federal-Aid participation decision on Exempt Projects, signed and dated by that District Construction Engineer, shall be included in the Field SA or Work Order back up documentation file.

If you have any questions, please contact Randy Borgersen at (850) 414-4168, SC 994-4168 or Stefanie Maxwell at (850) 414-4314, SC 994-4314.

AP/sm